The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1325.—Vol. XXXI. LONDON, SATURDAY, JANUARY 12, 1861. STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE.

MR. JAMES CROFTS, SHAREBROKER, No. 1, FINCH LANE, CORNHILL (established 16 years), begs to intimate that he BUYS and SELLS every description of BRITISH and FOREIGN STOCKS and SHARES, particularly BRITISH MINING SHARES, on which dividends are regularly paid realising from 15 to 20 per cent. per annum.

The improvements in the market predicted a few weeks since are now matter of fact, particularly dividend stocks.

WEEKLY LIST of SHARES RECOMMENDED for IMMEDIATE PURCHASE, and sure for profits:—

Great Retallack.	Penhale Moor.	Herward United.
Bottle Hill.	Wheal Ludcott.	Merilyn (special).
New Treleigh.	Trencrom.	East Budnick and Mount.
Wheal Norris.	Wheal Moyle.	Wheal Trevelyan.
Great Wheal Martha.	W. Bryn Gwiog (special).	West Wendron.

Mr. CROFTS has business to transact in all the above mines. 1

MR. JAMES LANE. No. 44, THREADNEEDLE STREET, LONDON, E.C.

JAMES LANE is in a position to SELL 2 Brynford Hall, £32½; 20 Camborne Vean, £4; 10 East Carn Brea, £7⅞; 50 East Alfred, 15s.; 1 Wheal Basset, £118½; 5 North Treskerby, £32¾; 20 Marke Valley, £4½; 5 Wendron Consols, £24½; 3 Wheal Trelawny, £18½; 30 West Wendron, 14s.; 10 East Wheal Russell, £10⅜; 100 Sortridge Consols, 15s. 6d.; 5 North Roskear, £28; 30 Wheal Wrey Consols, £1¼; 30 Dale. 6s. 6d.; 50 Cornubia, 6s.; 20 Tees Side, 5s. 6d.; 10 Penhale Moor, 50s.; 5 Wheal Kitty (Lelant), £14; 50 Central Minera; 50 North Minera; 50 North Wheal Providence, 30s.; 10 Moyle, 34s.; 50 Great Retallack, 33s. 6d.; 20 Cefn Cilcen, 18s.; 10 Tamar Consols, £2½; 30 Crebor, 9s.; 100 East Bertha, 6s.; 50 South Lady Bertha, 6s.; 50 Lady Bertha, 28s. 6d.; 10 Bedford United, £5½; 20 Ribden (18s. paid), 15s.; 30 Great Caradon, 17s. 6d.; 50 Huckworthy Bridge, 3s. 3d.; 10 Catherine and Jane, 9s. 2

FOR SALE, EACH NETT, and IMMEDIATE DELIVERY:—

1 Basset, £115¼.	1 Mary Ann, £193¾.	1 West Seton, £360.
1 East Basset, £115½.	4 North Treskerby, £32⅜	5 Wh. Margery, £7⅝.
2 Brynford Hall, £30¼.	20 Tamar, £2¼.	10 Wheal Wrey, 26s. 3d.
5 Kitty (Lelant), £13⅜.	20 Treweatha, 12s.	5 Wheal Hearle, £10¼.

Apply to JAMES B. BRENCHLEY, 78, Old Broad-street, E.C.
Bankers: London and Westminster, Lothbury. 3

MINING QUOTATIONS, AND "SO-CALLED" MINES.— The daily and weekly prices of shares put forward in the public prints are, as a rule, a perfect farce, and emanate from jobbers and dealers, to dupe and mislead the unsuspecting. Capitalists will, therefore, do well to seek reliable information and sound advice.—H. B. RYE, 77, Old Broad-street, London, E.C.
Established 18 years in the same office.
Bankers: Sir J. W. Lubbock, Bart., and Co. 4

PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 78, OLD BROAD STREET, LONDON, E.C.
MINING SHARES BOUGHT AND SOLD. 5

MR. LELEAN, STOCK AND SHAREDEALER, 4, CUSHION COURT, OLD BROAD STREET, LONDON, E.C., has SPECIAL BUSINESS to TRANSACT in GREAT RETALLACK SHARES.
WANTED:—50 to 100 shares in West Condurrow, and 20 shares in Spearne Moor. 6

MR. C. POWELL, MINE SHAREBROKER, 2, SPREAD EAGLE COURT, FINCH LANE, LONDON, E.C.

C. POWELL informs his friends and the public that the situation of his office (adjoining the Mining Exchange) enables him to act promptly on all orders confided to him, either by post or telegraph; and begs to assure those who may favour him with business on commission, or at nett prices, that his best endeavours shall be used for their interest.

SHARES FOR SALE at nett prices:—

20 Bottle Hill, £1 6s.	20 Merilyn, £1 7s.	10 Tincroft, £6 1s. 3d.
10 Crelake, £3⅜.	25 New Treleigh Con., £2⅜	10 Tolvadden, £3½.
1 East Basset, £117½.	10 North Downs, £4.	20 Vale of Towy, £10.
10 East Caradon, £12.	20 North Minera, £1 1s. 6d.	40 West Par, £4.
10 East Carn Brea, £7⅞.	10 Pendeen Cons., £5 11s. 3d	2 West Caradon, £79¼.
25 East Wh. Grenville, 17s.	20 Sortridge Consols, 16s.	25 W. Wendron Consols, 13s
10 East Wh. Russell, £10¼.	10 South Carn Brea, £33⅜.	15 Wheal Edward, £1⅞.
20 Gt. Retallack, £1 13s. 6d.	1 South Wh. Frances, £160	20 Wheal Norris, £1 2s.
2 Herward United, £22½.	2 Stray Park, £45.	2 Wheal Trelawny, £18¼.
20 Lower Park, £1.	20 Tamar Consols, £2 6s.	20 Worvas Downs, £2½.

Office hours: 10 till 5. Commission, 1¼ per cent.
Jan. 11, 1861. Bankers: City Bank, Finch-lane. 7

MESSRS. VIVIAN AND REYNOLDS, 68, OLD BROAD STREET, LONDON, E.C., MINING ENGINEERS, INSPECTORS of MINES, COMMISSION, and GENERAL AGENTS for the PURCHASE or SALE of MINE SHARES, RAILWAY, and EVERY OTHER DESCRIPTION of STOCK.
Commission on share transactions, 1¼ per cent. on £100 and above, and 2½ per cent. for less sums. 8

FREDERICK WILLIAM MANSELL, MINING OFFICES, 1, HATTON COURT, THREADNEEDLE STREET, LONDON, E.C.
Bankers: London Joint-Stock Bank. 9

MR. FRAS. G. LANE, MINING SHAREDEALER 44, THREADNEEDLE STREET, LONDON.
Bankers: London and County Bank. 10

MR. STEPHEN HUNT (late of the Mines Royal Copper Company, Upper Thames-street, London) is OPEN to an ENGAGEMENT.—Address, care of Thomas Pollock, Esq., 129, Fenchurch-street. 11

RICHARD CLIFT, MINE SHAREDEALER, late of Redruth, now 48, THREADNEEDLE-STREET, LONDON, where all letters are to be addressed. 12

MR. T. ROSEWARNE, 81, OLD BROAD STREET, LONDON, E.C., has FOR SALE:—

Brynford Hall, £33.	Great No. Tolgus, 16s 6d.	Pendeen, £5⅝.
Bryn Gwiog, £33½.	Gt. Wheal Martha, 19s.	Sigford Consols, £1⅜.
Crelake, £3⅜.	Hingston, £3⅜.	Sortridge, 15s. 6d.
Constock, £1¼.	Kelly Bray, 30s.	Stray Park, £44½.
Devon Gt. Cons., £422½.	Lady Bertha, 31s.	St. Ives Consols, £49.
Devon Silver-Lead, 5s. 6d	Merilyn, 27s. 6d.	West Caradon, £79.
East Caradon, £12.	New Treleigh, 53s.	Wheal Arthur, 6s. 9d.
East Carn Brea, £7 15s.	North Downs, £3 18s. 9d.	Wheal Edward, 40s.
East Russell, £10 3s 9d.	North Minera, 22s. 6d.	Wheal Wrey, 26s.
East Rosewarne, 35s.	No. Wh. Trelawny, 12s 6d	West Bryn Gwiog, £22¾.
Great Retallack, 33s. 6d.	North Wrey, 8s.	Wheal Norris, 22s. 6d.
Great Caradon, 17s.	North Robert, 30s.	Wheal Tremayne, £6.
Great Wh. Alfred, 15s.	Penhauger, 4s.	Wheal Trelawny, £18¼.

T. ROSEWARNE, from his practical experience, can recommend six mines which are safe for a great rise in the market within the next six months.
All orders per telegraph or post promptly attended to.
January 11, 1861. Bankers: Bank of London. 13

MR. GEORGE BATTERS, 5, COWPER'S COURT, BIRCHIN LANE, DEALER IN BRITISH MINING SHARES AND OTHER STOCKS.

Mr. BATTERS, from long experience and intimate acquaintance with all Mining Stocks, can advise as to investment of capital, at the closest market prices.

Mr. BATTERS has made a selection from the mines of North Wales likely to be largely profitable in respect of dividends, and with great prospective prospects of advance in market value of shares. Full particulars from personal inspection can be had on application.

Mr. BATTERS is a BUYER or SELLER in Bryn Gwiog, Herward, West Bryn Gwiog, Brynford, North Minera, and Silver Rake, &c., at close market prices; and is a BUYER of any number of West Bryn Gwiog shares at £22 per share. 14

MR. GEORGE BUDGE, 4, ROYAL EXCHANGE-BUILDINGS, LONDON, has FOR SALE:—2 Devon Great Consols; 5 East Basset; 100 West Wendron, 13s.; 45 Great Wheal Busy, £6; 10 Wendron Consols, £26; 100 Great North Tolgus, 17s. 6d.; 100 Great Wheal Martha, 18s.; 25 East Carn Brea, £7 16s.; 100 Carnewas, 9s.; 100 Great Caradon, 17s.; 100 Wheal Cupid, 19s. 6d.; 25 East Caradon; 50 Tolvadden, £3 2s. 3d.; 5 West Bryn Gwiog; 100 Charlotte United, 31s. 9d.; 50 Nant-y-Iago, 27s. 6d.; 100 Drake Walls, 17s. 6d.; 20 Wheal Hearle, £10; 6 Stray Park, £47⅞; 30 Camborne Vean, £4 5s.; 100 South Condurrow, 21s. 9d.; 100 Great Retallack, 37s. 9d.; 90 Wh. Trevelyan; 50 North Minera, 21s. 6d.; 35 East Russell; 5 Bryn Gwiog; 20 Alfred Consols, £3 10s.; 100 Catherine and Jane, 10s.; 100 South Buller and West Penstruthal, 15s.; 120 North Wheal Providence, 20s.; 100 New Wheal Frances, 9s.; 20 Gonamena, £3; 80 Lady Bertha; 2 Buller, £157; 5 Providence; 5 Silver Rake; 100 Wheal Alfred, 17s. 9d.; 1 South Frances; 20 Tincroft, £6; 50 Polgear, 14s.; 20 Great South Tolgus, £8; 200 Wheal Artisan; 100 Merilyn, 29s. 9d.; 150 Devon Silver-Lead, 5s.; 50 Sigford Consols, 32s.; 100 Wheal Norris, 22s. 3d.; 100 Wheal Harriett; 100 West Tolvadden; 30 Treloweth; 100 West Condurrow; 100 East Rosewarne. 15

MR. MURCHISON'S REVIEW OF BRITISH MINING FOR THE QUARTER AND NINE MONTHS ENDING 29TH SEPT., 1860, is NOW READY.
Price One Shilling. At 117, Bishopsgate-street Within, E.C. 16

GEORGE MOORE, 1, CROWN COURT, THREADNEEDLE STREET.

GEORGE MOORE will SELL the following SHARES, or any part, to-day, at quoted prices, FREE OF ANY COMMISSION:—

20 Alfred Cons., £3 6s. 3d.	1 New Wh. Seton, £47¾.	20 Trelow. (offer solicited).
1 Bryn Gwiog, £33⅛.	5 North Buller, £4.	50 Treweatha, 13s. 9d.
25 Buller and Basset, 21s.	50 North Minera, 21s. 9d.	2 West Caradon, £79⅛.
10 Camb. Vean, £3 18s. 9d.	2 North Roskear, £29⅛.	2 West Frances, £18⅛.
1 Carn Brea (offer wanted)	5 North Wh. Crofty, £8¾.	1 West Stray Park, £44¾.
1 East Basset, £116½.	50 North Robert, £1 6s. 9d.	25 Wheal Charlotte, 20s. 9d
53 East Caradon.	1 Old Tolgus United, £12.	13 Wheal Edward, 38s. 9d.
25 East Gunnis Lake (offer solicited).	10 Pendeen Consols, £5½.	20 Wh. Grenv., £2 18s. 9d.
	1 Rosewarne United, £30.	5 Wheal Kitty (Lelant).
25 Gawton, 5s. 6d.	100 Sortridge Cons., 15s. 3d.	1 Wheal Margaret, £53⅛
50 Great Retallack, 32s. 9d.	120 So. Condurrow, 19s. 3d.	1 Wh. Buller (want offer)
25 Great Alfred, 15s. 6d.	1 South Frances, £157½.	2 Wheal Trelawny, £18⅛
20 Hings DownCons., £3⅜	5 Stray Park, £44¼.	1 Tresavean, £10.
20 Holmbush, £2⅞.	10 Tincroft, £5 18s. 9d.	5 Rosewall Hill, £8⅛.
20 Merilyn, 26s.	20 Tolcarne.	

PURCHASERS of undoubted respectability can register transfers and receive CERTIFICATES of same previous to PAYMENT.

In any business that GEORGE MOORE is favoured with, in which he is the buyer, he will give CASH ON RECEIPT OF TRANSFER. 17

EDWARD COOKE, MINING SHAREBROKER, &c., 5, HERCULES PASSAGE, THREADNEEDLE STREET, LONDON, E.C., in thanking his friends for the liberal support they have accorded him, begs to assure them of his intention to adhere strictly to the principles which have been observed by him during the past year—viz., promptness and punctuality in all transactions committed to his charge, and the best attention to the interests of his clients. A list of eight mines has been selected with proper care by the advertiser, which he has no hesitation in recommending to his friends as being more than ordinarily safe for an investment, or with a view to a realisation of profits in a short time.

The following SHARES are FOR SALE, at nett prices:—

2 Stray Park, £45.	2 United, £65.	50 New Frances, 9s.
10 Holmbush, £3.	1 West Wh. Damsel, £60.	10 E. Russell, £10 7s 6d.
10 West Fowey, £5¼, x d.	1 So. Tolgus, £59.	5 East Carn Brea, £8.
10 Tincroft, £6.	1 Buller, £140.	3 North Busy, £5½.
10 So. Carn Brea, £3⅜.	5 Gt. So. Tolgus, £8⅛.	5 Alfred Consols, £3⅛.
50 So Condurrow, 19s. 6d.	25 Gt. Retallack, £1 16s.	20 Wheal Lewis, £1.
20 Polgear, 14s.		

BUYER of any number of Tolvadden, at the fair market price.
Jan. 11, 1861. Bankers: Commercial Bank, Lothbury, E.C. 18

JOHN GLEDHILL AND CO., MINE AGENTS AND SHAREBROKERS, MINING OFFICES, CORN EXCHANGE, LEEDS. 19

JAMES HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

10 Alfred Cons., £3 7s 6d.	2 Herward, £20 15s.	10 South Carn Brea, £3½.
30 Angarrack.	10 Hingston Down, £3 10s.	1 Stray Park.
20 Anglo Mexican Mint, £13 15s.	30 Huckworthy, 3s.	1 South Caradon, £303½.
	3 Herodsfoot, £34¼.	1 St. Ives Consols, £48¾.
1 Bryn. Hall, £36 11s. 6d.	1 Kitty (Lit.), £12 18s 9d	30 Sortridge Cons., 15s. 9d.
7 Bryn Gwiog, £32½.	30 Lady Bertha.	10 St. Day United, 13s. 9d.
20 Boscundle, £2½.	20 Lady Eliza, 10s.	25 So. Condurrow, 19s. 6d.
10 Bedford Utd., £5 8s. 9d.	10 Lewis, £1 2s. 9d.	2 South Basset, £20.
1 Buller, £143½.	10 Marke Valley, £4 3s 9d.	1 South Frances, £156½.
10 Bottle Hill, 26s.	2 Mary Ann, £19 15s.	2 Silver Rake.
1 Carn Brea.	50 New No. Minera, 3s. 6d.	60 Tees Side, 5s. 6d.
5 Cobre, £43¼.	20 Nant-y-Iago.	30 Tamar Con., £2 6s 9d.
2 Cook's Kitchen, £19⅝.	2 North Roskear, £29¼.	10 Tincroft, £5 13s. 9d.
1 Copper Hill, £93½.	5 North Crofty, £8 18s 9d	5 Treloweth, £3 10s.
5 Calvadnack, £7	10 Nanteos & Penrhiw.	5 Tolvadden, £3½.
30 Cuddra, 23s. 9d.	5 No. Basset, £4 3s. 9d.	20 Tretoil, 9s. 6d.
30 Cefn Cilcen, 17s. 9d.	10 North Buller, £4¼.	1 Trelawny, £17 17s.
3 Craddock Moor, £26⅛.	1 New Seton, £45½.	30 Vale of Towy, 9s. 9d.
10 Camb. Vean, £3 17s. 6d.	10 New Frances, 8s. 9d.	1 W. Caradon, £78⅞.
1 Cargoll, £16 15s.	10 North Robert, 31s. 6d.	50 West Ashburton, 2s.
20 Cath. & Jane, 8s. 9d.	3 N. Treskerby, £32⅜.	50 West So. Caradon.
1 Ding Dong, £15¼.	10 North Minera, 21s. 9d.	20 Wheal Unity, 14s. 9d.
20 Drake Walls, 16s. 9d.	5 No. Downs, £3 17s.	1 West Seton, £358½.
1 Dev. Gt. Con., £415.	20 New Treleigh, 56s.	1 Wheal Clifford, £202½.
100 Dale.	3 Old Tolgus United.	30 Wheal Crebor, 8s.
5 E. Caradon, £11 18s 9d.	30 Prosper United, 29s. 6d.	30 Wh. Trevelyan, 21s 9d.
10 East Russell, £10 7s 6d.	1 Providence, £45 18s 9d.	50 Worthing, 18s. 9d.
5 E. Carn Brea, £7 8s 9d.	50 Port Phillip, 10s. 9d.	1 Wend. Con., £23 18s 9d.
1 East Basset, £116½.	30 Polgear, 13s. 9d.	20 Wheal Grenville, £3⅛.
5 East Grenville.	50 Pachuca.	10 Wh. Ludcott, £3 17s 6d
10 East Rosewarne, 33s 9d.	1 Rosewarne Utd., £28⅞.	20 Wheal Wrey, £1 8s. 6d.
1 Grambler, £25 15s.	10 Rosewall Hill & Ransom £3 7s. 6d.	15 Wheal Herriett.
15 Great Alfred, 16s. 9d.		20 Wheal Moyle, 34s. 6d.
20 Gurlyn, 8s. 6d.	20 Redmoor, 4s.	5 Wheal Uny, £3 18s. 9d.
5 Great Crinnis, 16s. 9d.	20 Round Hill, 5s. 6d.	2 Wheal Margaret, £56¾.
5 Gonamena, £3.	5 Saint John del Rey, £26¾.	5 West Bryn Gwiog.
30 Great Retallack, 30s 6d.		50 Wheal Charlotte.
30 Great Wh. Martha, 20s. (fully paid up).	30 Silver Vein, (5s. paid), 17s. 9d.	5 Wheal Hearle.
		30 West Wendron.
3 Gt. Wh. Fortune, £12½	20 So. Lady Bertha, 4s. 6d.	

In January, 1858, I issued a list of the mines in which I deemed it advisable to invest, and this system I have continued each succeeding year. In order to demonstate to the public that mining is a legitimate source of employment for capital, and, with proper caution and advice, one of the most profitable, I published at the close of each year in the *Mining Journal* the result of my recommendations. I now, as previously, present the details of last year's list. The profits which I have shown might have been realised are as follows:—

	Dividend Mines.	Progressive Mines.
1858	23 per cent. upon the outlay	42 per cent.
1859	47 per cent. upon the outlay	62 per cent.
1860	16 per cent. upon the outlay	45 per cent.

Or, upon the three years' investments in dividend mines, an average profit of 28½ per cent., and in progressive mines of 49½ per cent. These astonishing results being made upon the principle of mutual assurance would have entailed but little risk. With confidence, therefore, I challenge comparison with any other mode of investment. It may be asked why I this year made the supposed purchase in each dividend mine so large? To this I reply that the price of such shares as Dolcoath, West Seton, &c., being so much greater than many others, it would not otherwise have been possible to show an average percentage. The profits on the Dividend Mines for 1860 contrast unfavourably with those of the preceding years, which can be accounted for by money being so much cheaper at the commencement than at the close of the year, and also by the great depreciation in market value of three mines—West Seton, Clifford, and Great South Tolgus, which at the former period were generally held in the highest estimation. This shows the policy of not confining investments to any one mine, however stable it may appear. The profits upon the Progressive Mines are most flattering, especially when it is apparent that they could, upon an average, have been realised within six months of the date of purchase. It will be observed that during the year profits might have been made upon 22 out of the 25 mines. The chief depreciation is in Nant-y-Iago and Boscundle; the merits of the former have yet to be tested, while the unfavourable position of the latter arises not from any deterioration of the mine, but through attempting to prosecute the necessary workings with inefficient machinery. Experience has convinced me that an investment in well-selected progressive mines is much more advantageous than in dividend stock, provided that large profits are realised when opportunity offers, which, as is apparent by the annexed list, generally occurs before much additional outlay is required. My list of recommendations for the present year will in a few days be ready for circulation; and it is hardly necessary to state that it has been compiled with the greatest care and reflection. I shall lose no time in forwarding a copy to those with whom I have already transacted business; but to others I shall make a charge of 20s., to be returned should business result.

DIVIDEND MINES.

Date of recommendation.	Mines.	No. of shares.	Market value.	Original outlay.	Present price.	Dividends.
Jan. 7, 1860.	Anglo-Mexican Mint	20	£ 14	£ 280	£ 280	£ 32 0 0
"	Botallack	2	160	320	390	5 0 0
"	Burra Burra	2	150	300	310	10 0 0
"	Carn Brea	4	80	320	400	56 0 0
"	Cobre	6	48	288	264	24 0 0
"	Dolcoath	1	400	400	520	62 0 0
"	East Basset	2	125	250	235	62 0 0
"	Great South Tolgus	20	14	280	165	37 0 0
"	Herodsfoot	14	21	294	476	56 0 0
"	Linares	27	11	297	270	24 6 0
"	Minera	2	150	300	330	27 5 0
"	South Caradon	1	255	255	305	33 0 0
"	St. Ives Consols	5	54	270	260	55 0 0
"	St. John del Rey	15	20½	307½	397	60 0 0
"	Tincroft	62	4¾	294½	372	15 10 0
"	Tamar	90	3⅛	281¼	247	45 0 0
"	United Mines	3	112	336	210	7 10 0
"	Wheal Cliffold	1	310	310	205	33 0 0
"	Wheal Ludcott	85	3½	297½	340	68 0 0
"	West Seton	1	400	400	360	67 10 0
"	Wicklow Copper	6	55	330	450	30 0 0
"	Wheal Basset	2	170	340	220	48 0 0
Total				£6750¾	£7006	£858 1 0

PROGRESSIVE MINES.

Date of recommendation.	Mines.	No. of shares.	Market value.	Original outlay.	Calls made to period of profit.	Calls made to period of sale.	Market value, which could have been realised at the subjoined dates.
Jan. 7.	Boscundle	17	£ 6	£102 0..	£ 8 10..	Dec.	£ 2½.. £ 42 10
"	Copper Hill	1	115	115 0..	—	April 14..	140 .. 140 0
"	Condurrow	2	65	130 0..	—	May 26..	85 .. 170 0
"	Cook's Kitchen	7	15	105 0..	—	April 21..	19 .. 133 0
"	Ding Dong	7	14	98 0..	—	May 12..	20 .. 140 0
"	East Caradon	17	½ 17s.	99 9..	—	Sept. 15..	11 .. 187 0
"	East Trefusis	33	3	99 0..	16 10..	Dec.	3½.. 115 10
"	Gonamena	46	2¼	103 10..	—	Mar. 3..	3½.. 161 0
"	Hingston Down	24	4⅜	105 0..	—	Feb. 18..	4⅞.. 117 0
"	Gt. Wh. Fortune	6	16	96 0..	—	Feb. 4..	20 .. 120 0
"	Lewis	33	3	99 0..	—	Mar. 24..	4¼.. 140 5
"	North Roskear	3	34	102 0..	—	Mar. 24..	40 .. 120 0
"	North Crofty	11	9	99 0..	5 10..	Oct. 20..	12 .. 132 0
"	Nant-y-Iago	20	5	100 0..	—	Dec.	1½.. 30 0
"	Old Tolgus Uni.	15	6½	97 10..	—	June 6..	15 .. 225 0
"	Rosewall Hill and Ransom	29	3½	101 10..	—	Aug. 4..	5 .. 145 0
"	Stray Park	4	24	96 0..	—	June 16..	62 .. 248 0
"	Sou. Carn Brea	50	2	100 0..	—	June 2..	3½.. 175 0
"	Treloweth	12	8	96 0..	—	May 19..	9¾.. 117 0
"	West Stray Park	19	5¼	99 15..	—	Mar. 10..	7 .. 133 0
"	West Sharp Tor	6	18	108 0..	54 0..	Dec.	22 .. 132 0
"	Wh. Tremayne	15	6¾	101 5..	—	Mar. 10..	9 .. 135 0
"	W. Wh. Frances	9	11	99 0..	—	May 12..	27 .. 243 0
"	Wheal Uny	50	2	100 0..	—	April 21..	3½.. 175 0
July 18.	Bryn Gwiog	2	60	120 0..	—	Nov. 10..	190 .. 380 0
	Total			£2571 19..	£84 10..	— .. —	£3856 5
	Calls added to original cost			84 10			2656 9
	Total			£2656 9	Leaving		£1199 16

Thus showing a profit of £1199 16s. upon an outlay of £2656 9s., or upwards of 45 per cent. per annum.
2, Adam's-court, Old Broad-street, January 11, 1861. 20

MR. T. P. THOMAS, MINING AGENT AND AUCTIONEER, 2, CROWN COURT, THREADNEEDLE STREET, LONDON. 21

NORTH MINERA.	CENTRAL MINERA.
CEFN CILCEN.	LOWER PARK.
GROSVENOR.	WEST BRYN GWIOG.
SILVER RAKE.	PANT-Y-PYDEW.

THE LONDON OFFICE of the above mining companies is at 2, CROWN COURT, THREADNEEDLE STREET, and Mr. T. P. THOMAS will at all times afford information respecting them. 22

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHARE DEALER, 11, DALE STREET, LIVERPOOL. 23

MR. PIKE'S ANNUAL CIRCULAR.

MR. JOHN ROBERT PIKE begs to tender his warmest thanks to the numerous patrons and friends who have favoured him with commissions during the year 1860. To many it has been a period of varied success in speculation, although, on the whole, a satisfactory balance of profit has been realised. Looking at the courses of other branches of speculative enterprise during the last twelve months, the comparative firmness which has characterised the Mine Share Market is highly encouraging. Usually speaking, the prices of mine shares fluctuate with the value of money and the necessary staples of consumption, affected at the same time by the soundness or otherwise of trade, conditions which during the period under review have been sensibly modified. We have had disasters in trade, complicated international politics, money dear almost to panic point, and convulsions rather than variations in other share markets; but, through all, the demand for British mines, both for investment and speculation, has been, all things considered, remarkably good. As a matter of course, copper shares have fluctuated with the variations in the standard, which is a principle unquestionably sound, and beneficial alike to the investor and speculator, apart altogether from the fluctuations in prices consequent on the usual accident of supply and demand.

In some quarters it might be construed as rudeness even to offer any advice to the investing public on the management of their own affairs, but speculation in mining property is of such an exceptionable character as to warrant him, at the risk of displeasing a few, in making his long experience in some measure available for the benefit of the many. He has addressed the public interested in mines, both through the medium of the newspaper press and in printed books on this subject. For years he has in this way been warning and advising, and now, at the commencement of another year, he would impress upon the minds of investors a few very ordinary, but in practice very valuable, truisms:—

1.—Never speculate without careful and diligent enquiry. The answer to this may be that no persons but those bereft of reason ever do; to which he would reply, assuming the correctness of the hypothesis, that a frightfully large number of the investing public must be in that lamentable mental condition.

2.—The prices at which shares may be negociated on 'Change is no guide whatever to the intrinsic value of the mines represented. Then how comes it, says the sceptic, that men confessedly knowing better should every day of their lives give more for shares than they are really worth? To which he would answer, that there are both values fictitious and values real. By the former the members of a guild may be benefited, but the latter can alone satisfy the investor who specifically exchanges money for an equivalent value.

3.—Seek the assistance of a reliable agent, a course which is perfectly consistent with the full exercise of personal judgment. In negociating the purchase or sale of mine shares the services of a respectable and competent agent are indispensable. Any person of average intelligence, after a very slight acquaintance with the forms of the House, can properly conduct the business of a client in railway stock or Government securities; but to creditably conduct a negociation in mine shares an amount of special knowledge on the part of the agent is necessary, which can only be acquired by long experience from actual observation in mining matters.

4.—Having selected an agent, be influenced by his advice until you discover it is no longer reliable. To neglect of this rule alone may be traced a large percentage of losses in mining transactions. Excessive acquisitiveness, when placed against the judgment of an agent, usually triumphs, and the result, in too many instances, is either gain deferred or serious loss. *Apropos* of this is the old saying, that "A bird in the hand is worth two in the bush."

The reiteration of the foregoing, if productive of little good, cannot in any case do harm. Long experience has convinced him of their soundness, an opinion which he feels convinced the most respectable mine share agents will unhesitatingly endorse.

As regards local mining connection, he has much pleasure in announcing that this branch of his business has been greatly extended. His long residence as a sharebroker in Cornwall has enabled him to establish a network of correspondents, by whom he is kept well advised of any change of importance in the mines of Cornwall and Devon, as well as those in the northern districts. The information thus derived is now, as heretofore, at all times at the service of his clients.

To one new feature, however, he begs respectfully to direct public attention—viz., the selection "of a set of six mines, three dividend and three progressive, for speculation and investment in the year 1861." In this task he has been aided by some of the best practical miners in Cornwall, In the choice of these mines no expense nor labour has been spared, and so strong is his personal faith in the selection that, if called upon at the time of purchase so to do, he will unhesitatingly undertake a moiety of the risk, by paying or receiving one-half of either profit or loss on the transaction. Whilst an uniform charge of one guinea will be made to the public on application, either by letter or personally, for the desired information.

The following list of prices Mr. PIKE intends to make a permanent feature of his advertisement, and he would draw particular attention to the fact that any holder of mine shares desirous of either buying or selling may have their wants inserted in the list by forwarding the particulars to the advertiser, who will in every case publish the particulars free of charge, unless a sale be effected, when a commission of 1¼ per cent. will be charged on the transaction. In making this concession to the public, Mr. PIKE trusts that they will limit their requisitions strictly to *bona fide* business:—

1 East Basset, £116½.	3 Rosewarne United, £28.	15 No. Downs, £3 15s.
15 East Russell, £10 5s.	1 South Caradon, £305.	3 Wendron Consols, £25.
1 Dolcoath, £490.	2 St. Ives Cons., £49.	1 Providence, £45.
50 Great Retallack, 33s.	10 North Frances, £5.	5 West Stray Park, 4½.
50 Great Alfred, 17s. 6d.	50 Wheal Harriett, 31s.	2 West Frances, £17.
40 Grosvenor, 10s.	2 Wh. Margaret, £51½.	25 East Grenville, 17s.
20 Merilyn, £1⅜.	1 Wheal Buller, £132.	10 East Trefusis, £3½.
2 North Roskear, £29.	5 Kitty (Lelant), £13½.	2 Brynford Hall, £30¼.
50 North Minera.	5 Stray Park, £44.	40 Cefn Cilcen.
5 North Treskerby.	50 Sortridge Cons., 15s. 6d.	15 East Margaret, £5.

Mr. PIKE continues to buy and sell for the fortnightly and monthly accounts, on receiving a remittance of 25 per cent. on the current market prices, as a deposit to cover risk. In conclusion, Mr. PIKE begs to assure his friends that all communications respecting business will meet with the same attention as heretofore, and to state that his facilities for negociating shares in British, Foreign, and Colonial Mines remain unimpaired.—3, Pinner's-court, Old Broad-street, London, Jan. 4, 1861. 24

MR. E. GOMPERS, MINE OFFICES, 3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.
BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES.
Terms, 1¼ per cent.
Bankers: London and Westminster Bank. 25

Original Correspondence.

SUGGESTION FOR THE SAFE WORKING OF MINES.

SIR,—All mines accumulate gases, but more at one time than at another; this extra discharge is caused by the diminishing weight of the atmosphere from the strata wherein gas is pent up; but if the weight diminishes from (say) 15 lbs. to 14 lbs. pressure, the pent-up gas overbalances the said weight, and an extra discharge of gas takes place. To propel gas from the workings as it accumulates, several ways are by managers (as they think best for the safety of the miner) adopted. There is no colliery manager but will (to the best of his ability and knowledge) adopt the best mode for the working of mines that can be for the safety of the men under his charge. No one can think for a moment that a manager will knowingly adopt anything to cause the loss of his men, but adopt that which would, if possible, be for their good and safety. I may add I have been from a boy of seven years of age in mines where much explosive gas accumulates, and I was also left fatherless by a preventable explosion of fire-damp. In my time I have made many observations on the proper ventilation of coal mines and on the nature and operation of gases, and have carefully marked the cause of many of those catastrophes which have happened so frequently in mines. I have seen several modes of ventilation, or several ways of conducting the air around the workings of a mine. I find the best mode of ventilation for the safety of the miner is that of separate and distinct currents of air for separate groups of miners—that is, to allow each working part its own proportionate quantity of pure air direct from the downcast, in proportion to the gas each separate working part accumulates, and not as by the other modes of ventilation, a mixture of pure and impure air, because if an explosion takes place in the mine by the other modes, there is often great loss of life. I will try to show the danger of conducting the air around the workings from one group of miners to another in one continuous route; and also show the safety of separate distinct currents of air for separate groups of miners. And I would here give a clear explanation, such as all who read may fully understand what I mean, as it is my special wish so to do.

Accompany me, then, into a coal mine, in which are employed men and boys: those men and boys are divided into separate groups and places—that is, 17, 18, or 19 men for each group or place, according to the actual number in each part of the mine employed. I will further illustrate my meaning by using the figures 1, 2, 3, 4, 5, and 6. In No. 1, then, 18 miners may be employed; there the air from the downcast first enters, after which it leaves that group of miners and passes on to No. 2 miners, then from them to No. 3, from them it proceeds to No. 4, thence to No. 5, and lastly to No. 6. In No. 1 group (where pure air from the downcast first enters) they are well ventilated, and may be considered tolerably safe, provided air too impure be not allowed to pass over a burning fire or furnace. No. 2 miners are less safe, from the fact that all the fire-damp accumulated in No. 1 goes directly in the same current upon the No. 2 miners; then it proceeds to No. 3 miners, from them it passes on with all the fire-damp accumulated in Nos. 1, 2, and 3, to No. 4; those miners so ventilated, where much explosive gas accumulates, are in great jeopardy; still onward the adulterated current goes to No. 5, and lastly to No. 6. Who, indeed, does not see that the miners in Nos. 4, 5, and 6 positions are liable any moment to be destroyed, without the greatest caution be exercised, by an explosion of fire-damp. Where this mode of ventilating mines is adopted, a great number of doors are always required to propel the air from one group of miners to another, and at the same time to allow the tram-boys to pass and repass with coal from the workings, but by separate windings for separate workings few or no doors are required; they only cause a great expenditure to an employer, and are often the cause of an explosion, as air which should pass around the workings will rush through the doorway the moment one is opened. No manager can adopt this mode of ventilation to have few doors; this may be seen by the number of doors employed at the collieries where explosions have taken place and caused great loss of life. The same mode of ventilation was adopted at Lund Hill Colliery; to propel the air from one working part to another 53 doors were required, and the explosion was the cause of death to 189 poor miners. The same mode was adopted at Cymmer Colliery (South Wales), and to propel the air from one working part to another 72 doors were required, and the explosion caused the death of 114 miners. By this it will be seen the miner may leave open a door, light his tobacco-pipe, or take off the top of his lamp, by which gas is ignited; but the mode of conducting the air around the workings is the cause of the great loss of life, because the power of an explosion and loss of life is always in proportion to the quantity of gas ignited, and the extent of the workings affected; if one current of air pass in one continuous route in and around six groups of miners, all the six groups will be affected by an explosion therein, because all the separate working parts accumulate gas in the one air-way in which the explosion takes place; and as all were ventilated by it, all would be affected in the same manner. That part where the explosion takes place is filled with raging flames, and the men are scorched to death with burning gases; in other parts they are instanstaneously killed by the expansion of hot air and gases, and others are suffocated by the noxious gases which fill other parts of the mine after the explosion. I am sorry to hear it often stated that miners are ignorant, when explosions take place and cause the death of a great number of them, and also charged with the cause of their own death. As before stated, the miner may ignite the gas, but he is not the cause of the great loss of life which follows after it is ignited, but the mode the manager conducted the air around the workings. The miner should be punished for any offence he may be guilty of, but not charged with the stigma of those persons who may (by their ignorance) have caused his death. I am surprised there are not greater losses, when we consider there are 200 or 300 in a mine, each one with a light in his hand exposed, and in the midst of this life-destroyer. I think it requires all to be wise, and not ignorant, to have no explosions or loss of life; but by the mode of separate distinct currents of air for separate workings, there is not that danger of such great losses of life, because an explosion is confined to that particular part of the mine where it takes place, and cannot interfere with any other divisions. To accomplish this object it is necessary to let a separate distinct current of air (say 6000 cubic feet per minute) be sent into No. 1 department, then let that contaminated air be made to pass away from the said part directly to the upcast shaft, and not be allowed to pass into any other part of the mine. In like manner ventilate the other parts separately. It will be seen that no large accumulation of fire-damp could, in such circumstances, take place. When one current is used to six parts of the mine, gas accumulating in all the six parts is allowed to mix and form one large amount of gas, by which an explosion will produce six times greater effect than it would do if the air were divided into six divisions. If 7000 cubic feet of air ventilates one division of miners, and this said air be so impure to be at the explosive mixture, nearly 1000 feet of gas would pass away in the air to the upcast per minute, or nearly 1000 ft. of gas is ignited at the time an explosion takes place in 7000 feet of air, but if six times that amount of air ventilates six groups or divisions of miners, nearly 6000 feet of gas will be ignited at the time an explosion takes place, or six times more than there is in a current of 7000 ft. of air. This being the case, the power of an explosion will be six times greater in one than it will be in the other, because the power of an explosion is always in proportion to the quantity of gas ignited. By dividing the air, the amount of choke-damp left after an explosion (which is the cause of great loss of life) would also be reduced to one-sixth, because the amount of choke-damp at the time of the explosion is always in proportion to the quantity of gas exploded. The extent of the workings affected by the explosion would also be reduced to one-sixth; and if the explosion only spreads around one part of the mine and not around six, it can only affect one-sixth of the number of persons employed. For the safety of the miner some persons will recommend doors, overthrows, and stoppings to be made strong enough, and well stowed with rubbish, several feet thick, to resist the shock of an explosion. "Prevention is better than cure." It is much better to take away the power which produces the shock, as there is little hope for the poor miner when the explosive power is such as to blow (as is often the case) rubbish out of a stopping several feet thick. As the power of an explosion and loss of life may be diminished, I ask why not adopt it? Is it because the mine will accumulate more gas by being so ventilated? No; because the quantity of gas that accumulates in mines is the same for one mode of ventilation as for another. Is it because the air-gates are not so large for separate currents as for the other mode? No; because there is the same area for one division of air as there is for all the six divisions. Is it because the explosive power is greater? No; because separating the air into divisions for separate workings is reducing the gas, and the explosive power is diminished in proportion to it. Is it because less pure air will pass down into the mine for the workings therein? No; because the amount of air is much increased, as the amount produced is always in proportion to the diminishing friction of the air in its passage around the workings—that is to say, the amount of air produced by the furnace is in proportion to the amount of friction it can overcome; if the friction of the air around the mine be very great the furnace will overcome the said amount of friction, but a less quantity of air is produced; but if not very great, a larger quantity is produced for the said amount of friction; therefore, if one division of air has the same area as six, and only to travel around one part and not around six, the friction of the air is diminished nearly 108 less than it was before it was divided. By this a much larger amount of pure air is introduced into the workings of a mine. Is it because one-sixth part of the air cannot do one-sixth part of the work as well as all the air does all the work? No; because the said one division of air will not be impeded in its passage through the air-gate by the other five divisions of air taking up the space it ought to have; at the same time it will only have to travel and propel air around one part and not around six. Is it because the air, after passing around six parts, is so impure that it cannot be divided? No; because nearly one-half of the gas that accumulates can be conducted from the miner and not to him. A person with a proper knowledge of this work is not at a loss how to accomplish this object so as to blow the pure air into the workings at the gate-way in which tram-boys pass and repass, and the impure air into the gateway where none are allowed to go but properly-appointed persons. To illustrate my meaning, I will suppose a number of chemical works near a large population, a certain portion of which are affected by breathing impure air when the wind blows from the works towards them; but in case a change in the wind takes place, blowing the noxious gases in an opposite direction, if its velocity be not 1-12th that which conducted the gases to them, yet all (by this change of the wind) will breathe a purer atmosphere, as no gas can come against the wind, be its velocity ever so small. This is just the case in the ventilation of mines; if the air be properly conducted around the workings, gas can be conducted away from them (be the accumulation ever so great), and not to them. Is it because the expenditure is greater? No; because the same is much reduced, as air-gates do not require the same labour for one division to pass as for six. The furnace expenditure in coal will be much less to produce the said amount of air; wages for trappers will be much less, because few doors are required. Is it because this mode cannot be adopted to any plan of working out coal? No; because by every mode of working two gateways are required—one to pass the air in, and the other to return it; therefore, do not propel it around the other parts after, but for the safety of the miner let it be adopted. I have done so for years, and not had any loss of life by it; yet I have had explosions, but such have been nearly powerless. I am sorry there is such great losses of life as that at Risca Colliery. I know, and so do all persons with a proper knowledge of ventilation, whether or not there is any cause for such explosions. I hope we shall hear of no more such like. I think every manager should forward the six following particulars to the Inspector every three months:—

1. The number of separate distinct currents of air in each mine.
2. The amount of air passing in each separate distinct current.
3. The extent of the workings, and the number of persons employed in each current of air.
4. The impurity of the air in the return in each of the separate currents.
5. The gate-way in which the pure air is conducted, and the impure air returned—that is, if the pure air be conducted on the gate-way, tram-boys pass and repass, or not.
6. The place where the impure air from all the separate divisions meet before discharging at the upcast. If the above be attended to, Inspectors will have a better knowledge how things in mines are conducted; and if any manager ventilate a great number of works with a large quantity of air, the Inspector should have full power to order and command the said quantity of air to be separated into divisions for the great number of works and men. By so doing, no doubt, a great loss of life would be prevented, as the number of collieries, and the great work Inspectors have to attend to, will not allow the underground to be often inspected by them.

St. Helens, Jan 8. W. HOPTON.

ON THE WORKING OF COAL MINES—"LANCASHIRE SYSTEM" AND "LONG WORK."

SIR,—In answer to your correspondent, "M. E.," I beg to say, for his especial information, that the Lancashire system, or working the coal homewards, is to be recommended, from the fact of its being the most economical, and, above all, its safety from explosions. By this system we are not working round, travelling through and ever forming magazines of gases. Our airways, travelling and coal-conveying roads require less timber, and are not continually being crushed by the superincumbent strata, pressing on the walls surrounding the old goafs, through which the ventilation and coal have to be taken. Our bords and shet-work are cut only to be immediately used in the removal of the whole. We have no recutting or splitting of pillars, no taking up and re-laying of rails, no clearing fallen roof from old drifts or bords, no crushed pillars, lifting of floor, or falling of roof; and with regard to safety from accidents, I ask "M. E." whether those fearful explosions which have occurred, and are continually occurring, arise in collieries worked upon the Lancashire system?

With regard to "long work," it is well known to be easy to ventilate, the air always sweeping along the faces of the working places—less work for the collier, as is proved by him getting one-and-a-half times the quantity of coal—requiring no timber, and very little expense in the maintenance of roads. There is no cutting or yardage to pay, which is a serious item; and by it we can work and open thin mines which had previously been abandoned, and it enabling us to bring coal into the market which could not have been worked upon any other system, which is beyond doubt the "best" and the most economical method of working coal mines, which are adapted to it, and under 3 ft. 3 in. in thickness. T. FARRIMOND.

VENTILATION OF COLLIERIES.

SIR,—In the Journal of Dec. 29, "A Pitman" seems to me to state that 200,000 cubic feet of air per minute *has been* made to circulate through one seam, in some colliery in the county of Durham. This, at all events, is what I understand him to state. I have read with care all that has been published for many years on the ventilation of collieries in Northumberland and Durham, and I have never met with any such statement, nor do I believe such a case either does now or ever has existed. That such quantity has been passed up one up-cast I have read, and believe to be correct; but how many pits, how many seams, how many acres of excavations and goafs were ventilated by such quantity of air? How many men were employed, and how many tons raised per day for such current? How much of it went to ventilate underground stables, and supply the boiler fires of underground engines, without ever finding its way into any one working place? How much air really did find its way into the workings? How many splits were there? What was the quantity per minute and velocity per second in each split? And, finally, how many acres of goafs and old wastes were ventilated with that portion that did find its way into the final or working places of the colliery?

Will "A Pitman" be so good as to tell us where this colliery, with its 200,000 cubic feet per minute circulating through the workings, is to be found on the map of the coal field of Durham, with the other particulars already indicated?—*Jan.* 4. M. E.

COLLIERY VENTILATION—NASMYTH'S FAN.

SIR,—In the *Mining Journal* of Dec. 29, Mr. Nasmyth states, "The fan represented in the drawing is capable of creating a current of fresh air through the workings of 200,000 cubic feet per minute." Allow me to ask him has it ever done so; if so, where and under what circumstances? If at Elsecar, under Mr. Hartop's management, I am sure Mr. Hartop would confer a great favour on many persons engaged in colliery management by giving the particulars.

He further states that this quantity (200,000 cubic feet per minute) can be modified and regulated to *any extent* by the attendant, who can in *an instant* increase the current to a perfect hurricane, so as to meet any sudden emergency, on receiving a signal from below to that effect." This cannot be correct. He may, I dare say, lessen the quantity at his pleasure; but to "increase it in an instant" to any "extent" is simply ridiculous. Are we one and all completely mistaken as to the increase of resistance from increased velocity? Does this resistance increase as the square of the velocity? If so, there must be, and that very soon, a limit to the effect produced by *any* ventilating power under the same unaltered circumstances. This law of the increase of resistance is the great and insurmountable difficulty in acquiring quantity. According to this law, double the quantity will require at least four times the power, and four times the quantity will require sixteen times the power.

Perhaps Mr. Hartop will try if he can merely double the quantity o air he has usually circulating at any one of the places where these fans are in use. If he would try the experiment, how much air be obtained at different velocities of the fan, up to its maximum effect, beginning from a very low velocity, I think he would soon see the effect of increased resistance. Suppose he begins with twenty revolutions per minute, and goes on increasing twenty revolutions in each experiment, until he attains the highest velocity he can, recording carefully the quantity of air per minute at each corresponding velocity; or, suppose he begins with 10,000 cubic feet of air per minute, noting the revolutions of the fan required for such quantity; and then for 20,000, 40,000, and so on, up to its maximum effect.

I am sure there is no person connected with mining operations but would feel greatly obliged to Mr. Hartop for the publication of the particulars of such experiments.

I must not be understood in this to be offering any objections to the use of mechanical power (although I am aware there are many) as a ventilating power, my remarks apply equally to any description of power used for causing the circulation of currents of air in coal mines. Can the shaft where the fan is used be also used either as a coal drawing-shaft, pumping-shaft, or both? M. E.

COLLIERY EXPLOSIONS.

SIR,—As I do not intend to enter into a discussion with an anonymous writer, I shall not make any further reply to "Pitman" beyond saying I do not see that he has given any proof of his right to call himself by that name. I also doubt whether "M. E.," who writes in last week's Journal, means a mining engineer who has had the practical and responsible charge of a colliery.

I am glad to find, from your South Wales Correspondent, that Mr. Thos. Brown is enabled to speak so strongly in favour of the Stephenson lamp as he did at the meeting at Newport. His views, as there stated, as to ventilation and safety-lamps, appear to be the same as my own. I contend that every colliery ought to be so ventilated as to render it safe to carry a naked light through it, excepting in cases of sudden discharge of gas; but, as it is impossible in certain seams of coal to foresee when these discharges will occur, it is, consequently, unsafe in such cases to use, at any time, a naked light in the workings or returns. Of course the pit ought, when the requisite ventilating arrangements are completed, to be in such a state as to render it safe to use naked lights at the downcast pit bottom, and in all the main intake air-courses—such as working levels, engine-planes, &c.

In reference to Mr. Nasmyth's statement in his letter of Dec. 24—that one-tenth of the fuel consumed by the underground furnace system suffices to generate steam for working the fan—I may remark that he is under a mistake upon this point, as I found upon comparing notes some months ago, at Lord Fitzwilliam's collieries, that the consumption of fuel for a given amount of air (say, 120,000 cubic feet per minute) was practically the same with the fan in use there, and the best of the underground furnaces at the collieries under my care, the difference, if any, being in my favour. The fans at Elsecar are applied at an upcast pit, which is used solely for ventilation; so that if the same course be adopted with a furnace, which is so in many cases, there would not be any destruction of pit ropes or shaft fittings.

Notwithstanding the application of these fans, I believe it is considered necessary to work the Elsecar pits with safety-lamps; at least, they were so worked when I was there last, and I consider this a very necessary precaution, notwithstanding their good ventilation. JOHN BROWN.

Barnsley, Jan. 8.

RISCA COLLIERY EXPLOSION.

SIR,—Knowing how ready you always are to draw the attention of the public to cases of real distress, we beg to state that we have formed ourselves into a committee for the purpose of collecting and distributing articles of clothing, &c., for the relief of the poor sufferers mentioned in our circular, which we enclose you, and we trust through the medium of your columns, to secure the interest and sympathy of the public, and should feel deeply grateful by your inserting the same in your paper; or, if you think it would be better, a few words to the same effect.

We are, Sir, your obedient servants,

The Gaer, Jan. 9. THE LADIES OF THE COMMITTEE.

"Newport, Monmouth, Jan., 1861.

"SIR,—We are desirous of assisting the efforts of gentlemen in this neighbourhood who are soliciting contributions for the relief of the 51 widows, 120 orphans (66 of the latter being under five years of age), and 8 aged parents of the 142 men who lost their lives from the sad explosion at Risca Colliery on December 1 last, and we respectfully request your co-operation in the above object, and shall feel very grateful by your bestowing any clothing, &c., for the poor sufferers; or should you prefer it, by forwarding 12 postage stamps.

Mrs. Powell, of the Gaer, Newport, Monmouthshire, has consented to receive any contributions you are kind enough to send.

"We are, Sir, yours truly, the Ladies of the Committee—

Lady TREDEGAR, Tredegar Park	Mrs. HAWKINS, St. Woollos Vicarage
Mrs. PROTHERO, Malpas Court	Mrs. GRATREX, Kingshill
Mrs. CHAN. WILLIAMS, Bassaleg Vicarage	Mrs. POWELL, The Gaer."

MINING—METALLIC AND COAL.

SIR,—I am a constant reader of the *Mining Journal*, and as I know nothing of Cornish mines, having been engaged in coal mines all my life, I take a great interest in the accounts regularly published respecting the Cornish mineral mines, and the peculiar ideas and the ways of managing them. But there is one thing which puzzles me continually, that is the accounts given of "man-engines,"—What can those things be?

I gather from your Cornish Correspondent that they are a rather expensive article, and that they require almost a whole shaft to themselves, which, as he remarks, is no joke. Now, I should fancy that the labour and fatigue attending climbing up a shaft (say, 100 fms.) must be a very serious affair. I fancy that our North Country miners would require a very material advance on their tonnage prices to induce *them* to do such a thing. What, then, can be the reason that in Cornwall, when they fit a shaft up for drawing "stuff," as they call it, they do not fit it up decently, so that they can draw the live stuff up also? It would surely require no profound mathematician to demonstrate that such an arrangement would be an extremely profitable one, and most highly beneficial to the health of the miners. They must drag the "stuff" up in a very odd manner, if the live stuff cannot go up by the same route. If any of your Cornish correspondents would be so kind as explain what a "man-engine" is I should be extremely obliged, as I feel very curious about that.

Before concluding, I wish to have a word with your Cornish Correspondent. He mentions, in the Journal of Dec. 29, the plans of the late lamented Herbert Mackworth for ventilating a Cornish mine, with a view of improving the health of the miners, and lessening the cost of working their mines. He disposes of him by stating that his experience of coal mines gave his opinion no weight as to the conduct of mineral mines, as they are two distinct pursuits. This, I think, is not sound.

The ventilation of mines of all kinds are pretty nearly alike; the principles remain the same; and one who understands thoroughly the ventilation of coal mines can have no difficulty with mineral mines, *so far as their ventilation goes.* And I certainly think that the views of Mr. Mackworth referred to were of the soundest kind, and if carried out calculated to be of the greatest benefit to all concerned. COAL MINER.

Newcastle, Jan. 10.

IRON MANUFACTURE, &c.

SIR,—"A. Q. D.," in the Journal of Dec. 29, says he cannot agree with my plan of giving out work by contract to the extent I would advocate; "No doubt," he says, "it would have a tendency to *lessen the number of accounts*, but I question whether it would *satisfy the workmen*, so as to *prevent strikes.*" Is "A. Q. D." prepared to maintain that workmen would not be satisfied with what may be due to them for services performed? If so, there would be an end to all reasoning on the subject, and squabbling for the rights of others would be the order of the day. As to workmen or sub-agents having the payment of their several accounts "direct from the office" of a manufacturing establishment, or from the pay-table of a "working company" of operatives, duly graduated into proper ranks and classes, mutually agreed upon by the entire members of such "company," there can exist no possible difference, in my view of the case. "A. Q. D." says "his opinion is founded on great intercourse with workmen:" if this be true, he has evidently much to learn with respect to the many advantages that workmen and sub-agents would derive from pulling together as "working companies," instead of individually struggling for self alone, with chances, as it were, ten to one against them; and these advantages

would be realised without the slightest cost or injury to their employers. "A. Q. D." says he "believes the great evil of the Cwm Avon Company is having too many agents, instead of the reverse, which the tenor of Mr. Rogers's letter would lead us to suppose;" and yet this writer admits at nearly the commencement of the letter under consideration that my plans "would have a tendency to *lessen the number of accounts*" on a pay-day; and at the commencement of his second paragraph he also admits that my plan of giving out *by contract* would entail but *little labour as regards the office*. To attempt to grapple with these opinions would be a complete waste of time. And with respect to the numerous enquiries of "A. Q. D.," as to the yield and cost of pig-iron, &c., it would be useless to attempt anything of the kind, if it is merely to enable him "to elucidate the matter a little more," after his observation, "as regards *the yields*, I do not think it *over desirable to be particularly strict*."

With respect to incompetent "managers, deputies, clerks," &c., at iron or other extensive manufacturing concerns, that is a point for the proprietors of such concerns exclusively to determine upon. From long experience, my opinion of the case is this—that agents of all kinds generally do the best they can for their employers; and nothing more could in reason be expected from them, but if such agents are desired to undertake the carrying out of processes the principles or practices of which they may not understand, or at best but imperfectly so, the fault would rest entirely on their employers, and all miscarriages in such cases would proceed not from the *fault* of agents, but from the *misfortune* of their not having been previously and duly instructed in the new task they were ordered to carry out; the fault, the folly, and the cost also of these experiments falling likewise, and very properly so, upon the employer. When new and important inventions are submitted, say to ironmasters—as for instance, the saving of from 15 to 20 per cent. of the yield of iron from their blast-furnaces—it becomes a necessity that the previous routine in the working of such furnaces should be modified to suit the circumstances of the case; but if the proprietor of these furnaces, anxious, no doubt, to realise the saving above referred to, should refuse to adopt these modifications, and persist in requiring his usual agents to effect the improvement alluded to, the sure result would be great delay, if not a total disappointment, in the end, and double, perhaps treble, the cost of properly going to work. This is not a fanciful picture, but a true reflex of the general system of iron making in Monmouthshire and South Wales, and the real cause of the lamentation so forcibly expressed in last week's report in the *Mining Journal* from those districts—"That many works are actively engaged is true, but, generally speaking, at a figure extremely low; indeed, I should say, ruinously low, for with regard to *one establishment* I have been told that the loss upon the last two or three years' manufacture has amounted to an *almost fabulous sum!* A sum so large, in fact, that the concern could only have been saved by its immense capital, its varied and extensive ramifications elsewhere, and the *address and exertions of its managers!*"

3, *Railway-street, Newport, Mon., Jan.* 8. S. B. ROGERS.

MANUFACTURE OF WROUGHT-IRON—INFRINGEMENT OF PATENT.

SIR,—In the Journal of Dec. 22 I find a notice of an invention patented by Mr. Parsons, of Pont-ar-Tawe, for the improvement of the manufacture of wrought-iron, which is precisely on the same principle as my patent, bearing date July 23, 1856, which improves the manufacture of iron by the introduction of charcoal and other materials with the blast. I also find that Mr. Broad, of Willenhall, has patented a precisely similar invention, and I am, therefore, taking proceedings to prevent the infringement of my patent by these and other gentlemen in various parts of the kingdom. As the invention is given out by Mr. Parsons and others as quite a novelty, I trust you will insert this correction, in justice to— JOHN ONIONS.

Birmingham, Jan. 4.

THE MINERS' ASSOCIATION OF CORNWALL AND DEVONSHIRE.

SIR,—It appears from last week's Journal that Mr. Robert Hunt's plan for the establishment of a Miners' Association is now being brought into practical operation, and that there is a fair chance of its soon being a useful public institution. But, in the mean time, in the minds of many some doubts exist as to its plan and objects.

In the previous attempts to establish Mining Schools—although they were liberally supported by gentlemen of the county of Cornwall, and superior education was supplied to the pupils, many of whom now fill important and influential mining situations—there was a want of success attending the efforts made, which probably arose from those mining schools being confined to one central establishment at Truro, at a distance from most of the mines of the county.

Mr. Hunt's plan is different in principle, from what that gentleman states in his valuable sketch of the plan and objects of the Miners' Association. It appears that it is intended to be an institution, not confined to one central establishment, but having several centres of operation in the county of Cornwall and Devonshire, to promote the giving to the working miners, and the young who are preparing for mining employment, such preliminary instructions as shall aid them in their future operations, as well as an institution which shall be one of mutual benefit, affording a means of intercommunion with each other, to the mining engineers and agents themselves. With regard to the first of these objects, it is intended to bring into each local mining district the most desirable instruction to the working miner and the young, by the employment of properly qualified teachers in the several departments of knowledge most suitable for their future position. Already Mr. Richard Pearce's services have been secured as a lecturer on, I believe, mineralogy, assaying, and the chemistry of the metals. And he having devoted much time to the study of these subjects, it is admitted by those to whom he has given instruction that he is well qualified for this position; and this is further shown by the demand for his services by mining gentlemen in different parts of the county of Cornwall. I presume that his attention will be principally devoted to the duties in which he is at present engaged, and that it is not intended to make him a general instructor of mining, but that other teachers will be appointed to other departments when the funds of the association will admit of it. Of course, it is not intended to make mine agents, but simply to supply such suitable instruction, so as that those employed, or intended to be employed, in mining pursuits shall be better adapted to acquire and carry out such practical operations in mining as can only be acquired in the mine itself.

And as regards the second object, it is generally acknowledged that nowhere can be found better mining engineers for every department connected with the working of metalliferous mines than the mining engineers of Cornwall. They possess great talent and energy, and their services are required in every part of the world where mining operations are carried on. Now, Mr. Hunt proposes that the careful observations and valuable experience of these gentlemen shall be recorded; that they shall have periodical meetings in each of the large mining districts in the counties of Cornwall and Devonshire, at which lectures and papers on the phenomena of mineral formations, mining and mine engineering, in a friendly spirit, shall be read and discussed, and afterwards, published under the title of "Transactions of the Miners' Association of Cornwall and Devonshire"—such Transactions to be supplied gratuitously to every member. The results to be derived from such a course of procedure cannot fail to be beneficial to all, and injurious to none; because it is from enquiry and investigation that correct results are to be obtained. From analogical reasoning this is sound in theory, and will work well in practice. This is shown by the results effected by similar associations, where they are composed of persons prosecuting great and important industries. The proposed plan, therefore, for establishing a Miners' Association is not an empirical one, as may be proved by reference to the following, amongst many others, that might be named.

The Institution of Civil Engineers was established in consequence of its being felt that there was a want of a means of intercommunion amongst themselves of the engineering profession, and that an institution having for its object the furtherance of professional knowledge might be eminently useful. Accordingly, in 1817 a society was formed for promoting a regular intercourse between persons engaged in its various branches. The Royal Institute of British Architects has been established in the present century "for facilitating the acquirement of architectual knowledge, and for the promotion of the different sciences connected with it;" and, as a result, more has been done in architecture throughout this country during the last half century than in the preceding 200 years. The Royal Agricultural Society of England was established in 1838, with a view of improving the general system of agriculture in this country, and of engaging talented men in the investigation of such subjects as are of deep practical importance to the British farmer. The labours of this society have been of immense advantage to the agricultural interest, and its published journal is one of the most useful and interesting periodicals which a farmer can study: its results are spreading over the world, and its machinery and implements are considerably improved.

In our large towns and manufacturing districts associations are formed for investigation and scientific enquiry, and valuable results are obtained.

An objection has been made that by the proposed plan of the Miners' Association theory is substituted for practice. But mines, as a rule, are not supposed to be successfully worked without some theory. Where a practical mind is guided by theory he is more likely to meet with success. Out of numerous instances that may be named let the two following be taken as examples. Dolcoath and North Roskear, two remarkable mines adjoining each other, which are managed by superior mining engineers—Capt. Chas. Thomas and Capt. Joseph Vivian. From the first of these, Dolcoath, after the water had been let in for several years by a former manager on unproductive ground for a very considerable depth, the water was again drawn out by Capt. Thomas, and it is now being worked as one of the most productive tin mines in the country; this was the result of theory derived from long experience and correct observation of mining. In the second mine, North Roskear, after a large part of the mine had been relinquished on the advice of reputed good practical miners, Capt. Vivian, by perseverance and great energy, and the result of theory derived from his experience, prosecuted this mine so that it has since returned not less, probably, than 200,000*l.* in profits to the lords and shareholders. And one cannot now view the superior arrangements at surface and underground at North Roskear in many departments of mining, which is not surpassed in the country, without having the conviction that the manager of this mine possesses very superior talents as a mine manager—the result of theory combined with practice.

When the Miners' Association is fully established, and its principles understood, the mining engineers and agents of the county will not fail to take advantage of its benefits, and to appreciate its utility; and a proper emulation will spring up, so as to make it as useful an institution as the Association of Engineers of the North of England, or that of North Wales.—*Jan.* 5. A MINE ADVENTURER.

WHEAL EMMA—CAPT. ENNOR'S TRAVELS.

SIR,—So Capt. Ennor is going to travel, having realised his fondest expectations in this country. What shall we do without such a man? For sixteen long years I have had the daring to cross a lance with him occasionally, but generally with a mask, for how could I otherwise face such a man? On this occasion, however, I will not wear a mask, as I wish to receive his thanks for presenting the annexed report, a copy of which he appears to have lost, otherwise he certainly never would have written his letter in answer to remarks by friends of mine, under date of Oct. 20 last, having reference to the dip of the ore at Wheal Emma, and the stopping of the engine-shaft and sinking another considerably west, which Capt. Ennor denied to have recommended. Please, therefore, to annex the Captain's report, so that he may take a copy with him and compare notes on his tour. All I ask in return from Capt. Ennor is, that he, assisted by your Truro Correspondent, will kindly answer the question put by my friends in the Journal of Oct. 20; and clearly define that simple law in nature which should be familiar to reporting agents, as by acting upon it at Wheal Emma I saved the proposed useless expenditure of 2000*l.* for a new engine-shaft, so strongly urged by Capt. Ennor, and the mine from being abandoned as a failure. And as this law is proved to be applicable to almost every mining district in the kingdom, as shown by the careful personal observation of practical men in largely productive mines, it cannot be too well understood. I shall feel obliged also if your Truro Correspondent will inform the mining world by what means he has arrived at the conclusion that "old miners" have a "prejudice against lodes dipping into a hill," as he states in his article on Dolcoath.

I am aware that such a remark has been made before by some writers; but I consider it a misinterpretation of the miners' words, as my personal acquaintance and frequent conversations with many good miners lead me to the conviction that your Truro Correspondent, as well as other writers upon the same subject, are in error, and not the miners.

The object of mining correspondence, through your widely spread Journal, should be correct information upon important general laws, whether having reference to mineral veins, or other subjects. I trust, therefore, it is not supposed that I narrow my views to Wheal Emma, or the district, in any remarks I may make; although I am so narrow-minded as to believe that any one who carefully studies from frequent personal observation the formation of mineral veins in one district, having similar geological features to those which constitute the majority of the mining districts of Devon and Cornwall, will find the same general laws applicable; and he who wishes to become familiar with the operations of those general laws, and have them indelibly impressed upon his memory, can adopt, in my opinion, no more certain method of securing the object than that of entering upon a new mining district, and, in the face of all the adverse opinions of the great mining authorities, follow out the pursuit of mining at his individual cost on a scale of such magnitude as to be seriously inconvenient to him in a pecuniary sense; and having, by seven or eight years' struggling, accomplished the great desideratum of discovering a rich mine, and making all the mining authorities unsay all they had written against the district, he may stamp it with immortality by wading through a five years' Chancery suit, to prevent one who constantly refused to aid his efforts with a shilling from robbing him of all his gains; and then he will experience what I have at Wheal Emma, and from which I have just emerged by the death of my opponent, and which suit has had much to do with the depression of Wheal Emma.

Jan. 8. CHRISTOPHER ROBINS.

Dec. 1, 1856.—WHEAL EMMA: I this day visited and thoroughly inspected the above-named mine. I found the 22 fm. level driven west about 13 fms., in which the lode is large, and showing traces of ore, but not to value. A portion of this lode is still standing on the north side; the men are now about to cut into it. The 10 fm. level is driven about 50 fms., where the lode is large, and many fathoms of it is tribute ground. A few feet behind the end this level is showing very good ore, but in the end there are only casual spots. The lode is large, but only about 6 ft. of it is carried; yet, judging from its appearance, it strongly indicates a speedy alteration for the better. The adit end west is driven about 20 fms. west of the new shaft and cross-cut. Here the size of the lode is also unknown, only a portion of it being excavated, which is composed of sand, quartz, and iron, spotted with copper. This may be fairly termed a beautiful gossan back; indeed, its fellow I have never seen, showing such ore and gossan for above 100 fms. in length, in the two counties; and if we are to be guided by such indications, one might reasonably conclude that ultimately a large deposit of copper will be met with dipping in a westerly direction, as the adit end west is still holding on as promising as ever. I find you have again let the engine-shaft to be sunk. With this I do not agree, as the ore is evidently dipping west full 5 ft. in 6 ft., consequently the shaft will ever be in dead ground, and every level will increase in distance to reach it. The new whim-shaft should have been a diagonal one, and been made the engine-shaft. If you wish to succeed, take my advice and stop sinking the shaft, and extend the 10 and 20 fm. levels west, and sink winzes from level to level, so that they could be converted into a shaft when required. If the mine prove productive, it must eventually come to this. In conclusion, I beg to say if you continue sinking at the east end you will never pay a dividend. I could say a deal more, but until I hear from you let this suffice.—NICHOLAS ENNOR.

CONNORREE MINING COMPANY.

SIR,—It is now clear that "Honestas" is afraid to come to the scratch. If he really was what he designates himself—"Honestas"—he would have accepted my challenge, and thrown off the mask; therefore the public will judge of his insinuations and statements as they deserve.

The mischief arising from this incognito is, that various persons are accused of being the author of the notable invention in question, and blame will, probably, fall where it is undeserved, while the guilty may go free. Rumour is rife in attributing the letter to Mr. Vivian, of the Lucan Iron-Works, Dublin; and if this be the fact, it will be a remarkable fact indeed, even in these days of facts astounding; for I learn that this gentleman is not a shareholder, although much interested in the enterprise, as might be supposed, inasmuch as he supplies all the materials necessary for the Connorree Mines which come within his branch of commerce; therefore, if it be true that Mr. Vivian is "Honestas," the only inference to be drawn is, that he was not, but desired to be, a shareholder; and endeavoured to depress the value of the shares that he might effect a purchase at a price much lower than they then commanded in the market.

I am, moreover, assured that Mr. Vivian, accompanied by Mr. James Hollow, of Lelant, went down to Connorree, and were shown over the property and works, with care and attention, by Capt. Roberts personally, and both are said to have expressed their opinions in the most decided and flattering way as to the value of the new discoveries, and fully approved of all they saw.

I am thus precise, that Mr. Vivian may have an opportunity of repudiating the rumoured imputations on himself, and prove them to be unfounded; and judging from the high estimation in which Mr. Jame Hollow is held in Cornwall, and amongst mining men, he will not, I am sure, permit his name to be mixed up in anything that has the semblance even of being underhanded, but will readily explain the object of his visit to Connorree with Mr. James J. Vivian, of the Lucan Iron-Works, Dublin. The letter of "Honestas" was wanton, and wholly devoid of truth, and it is only just that its ownership should rest on the right person.—*Jan.* 10. W. W. M.

UNIVERSAL PRIVATE TELEGRAPHY.—The revolution which has been wrought in the system of intercommunication by the introduction of railways and telegraphs has so impressed us with the idea that everything would be better done "if 'twere done quickly," that it is certainly not unreasonable to suppose the proposition for establishing telegraphic communication between two offices or places of business of the same firm, or between a private office and the nearest public telegraph station, will meet with many supporters amongst business men. To develope this project, the Universal Private Telegraph Company has been formed, and Professor Wheatstone has, it is said, brought his universal telegraph to such perfection that in the hands even of non-professionals a speed of 100 letters per minute can easily be attained. So weak a current is required to work these instruments that 30 of the conducting wires can be perfectly insulated and combined into a cable scarcely half an inch in diameter; and the insulation being secured by the application of Messrs. Silver and Co.'s ebonite (hardened India-rubber) instead of gutta-percha, there is no fear of the insulation becoming defective. The great feature of the company is the proposition for renting the wires and instruments, the former at the rate of 4*l.* per mile per annum, and the latter at 6*l.* per annum for each instrument, so that a firm whose places of business are two miles distant may have them put in telegraphic communication with each other, and the whole machinery kept in perfect working order, for 20*l.* per annum. Prof. Wheatstone has also devised an improvement upon the Morse system of printing telegraph, the object of which is to facilitate its use by inexperienced manipulators.

SILVER IN CALIFORNIA.—Accounts from San Francisco to Nov. 9 show that highly sanguine expectations are still entertained of the results shortly to be derived from the Washoe Silver Mines. A respectable and cautious merchant, who had hitherto looked with doubt on all the statements regarding them, now writes that the testimony which has reached him on the subject leaves little room for disbelief. It is averred that the quantity exceeds both in extent and richness all previous mining experience. "Persons perfectly conversant (it is stated) with the mines of Mexico and Peru say that there can be no comparison between these and the Washoe mines, and the main trouble at present seems to be that the ore is too rich, and therefore too difficult of reduction."—*Times.*

Meetings of Mining Companies.

TRETOIL MINING COMPANY.

A special general meeting of proprietors was held at the company's offices, Austinfriars, on Tuesday, Mr. OMMANEY in the chair.

Mr. W. CHARLES (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed.

The report of the agent was read, as follows:—

Jan. 5.—I beg to report that since the general meeting, held in June last, the tin alluded to in my report to that meeting has been met with in the 10, and tin raised to the value of upwards of 1000*l.* from workings of a very limited extent; we hope in three or four weeks to commence another stope further east in this level. The tin when first discovered in the 10 was more concentrated in the lode than it is now, forming solid leaders of tin of unusual richness: the lode has since been much larger, and harder for breaking, and the tin more disseminated; had it continued as rich as when it was discovered full 500*l.* worth of tin more would have been raised up to this time. The lode, which is from 10 to 15 feet wide, is still of great promise, and will, I have no doubt, continue to yield large quantities of tin in the ground already discovered, and when opened out at the various levels, which can be done with great facility from the old workings, the lode having been intersected in the 40 cross-cut from the engine-shaft, 100 fms. east of the present workings, on the tin, and drained the whole of that distance. From the 40 below adit to surface is 90 fathoms on the course of the lode, therefore there are 9000 fms. of lode drained, and standing whole above the 40 cross-cut west to the present working on the tin to surface. The value of this can only be ascertained by its being explored; there are great facilities for doing this by extending cross-cuts from the various levels in the old Tretoil workings and extending east on the course of the lode; in the 30 a cross-cut is already driven to within 12 or 15 fms. of the lode. The lode discovered, and already taken away in the 10, near Mine Park shaft and above, has produced tin to the value of 11,000*l.*, at an average of full 20*l.* per fm. I see no reason why the ground already drained to the east should not produce similar results when properly laid open, which would leave good profits, there now being ample machinery on the mine for pumping and stamping; there is also a winding-engine on the mine, which can be put up at no great expense. The great object for the future should be to keep the stamps constantly at work, and, if necessary to increase the number of stamp-heads, the stamping engine being of sufficient power to work 48 heads, which is double the number we have at work, and which have been only at work eight to ten hours out of twenty-four. Thirty tutwork-men are employed at present in the rise in back of the 20, the stoping in the back of the 10, marking out the lode in the side of that level east for another stope, and in putting in a stull in the back of the adit, east of the previous workings, preparatory to the commencement of another stope there, where we have reason to believe there will be found a great deal of productive tin ground standing east of the previous workings, which were worked up to near the surface. The rise in back of the 20 will, when holed to the 10, effect a communication with the old workings at the 20, west of the engine-shaft, and the workings on the tin lode near the Mine Park shaft, which has not been sunk below the 10; the holing of this rise will lay open a great deal of tin ground, and is otherwise a very desirable object to accomplish; but this rise being 60 fms. from the nearest shaft at the 20, our progress here is very slow, for want of proper ventilation; we hope, however, to hole to the 10 in about two months. The rise has been put up mainly in the country to the north of the lode; the lode has been cut into very recently 4 ft., and found to be worth for that width 15*l.* per fm. I would recommend that the driving of the 30 cross-cut be at once resumed, to cut the tin lode, and that the 20 and 30 should as soon as possible be extended east on the course of the lode, to explore the new ground. In order to carry out the mine in a proper and systematic manner, an expenditure of 100*l.* for labour cost above the returns should be calculated on in the tin department for six months: this sum may not be required for this length of time, but I think you should be prepared to incur this expenditure if necessary, as the pumping, and other fixed charges, which form a large item of the monthly cost, are all the same, whether the returns are large or small. I have every confidence that profitable results will speedily follow a more vigorous prosecution of the mine; the advantages we have in this respect are immense. The late heavy floods caused nearly double the quantity of water to flow into the mine, which greatly impeded our general underground operations, and added greatly to the cost. Nothing has been done in the 40 cross-cut for many weeks past. The very severe frost we have experienced for some time, and which still prevails, has prevented our returning as much tin as we should otherwise have done. It has prevented, also, our getting ready for sale the copper ore partly dressed, to the value of about 60*l.* There is at surface about 300 tons of magnetic iron ore. I have arranged for the disposal of a portion of this (if not the whole) to Mr. Martyn, in exchange for coals. I hope this transaction will lead to the resumption of operations on the iron deposit, which we hope soon to be able to carry out at a good profit.—R. RICH.

The SECRETARY, in explanation of the report, said as soon as it was found that the tin in the 10 held down, a rise was put up in the back of the 20, and within the last few weeks driving had been commenced by the side of the old workings for tin, at the extreme point, where very little had been done. By driving the 30 cross-cut some 14 or 15 fms. the same lode would be cut 10 fms. deeper.

The CHAIRMAN having entered into some explanations with regard to the lease, the committee were re-appointed. He (the Chairman) then read a list of the shareholders in arrears of call, when it was proposed to give the committee power to accept the shares of each of the shareholders who may be in arrear, either partially or in full payment for the calls due thereon; or to make such other arrangements with the defaulting shareholders as they may deem expedient, and to empower the committee to cancel, re-issue, or sell such shares at such prices as they may think advisable for their interest.

The CHAIRMAN, referring to the financial position of the company, said that by the sale of the engine they expected to clear off all the merchants' accounts, and if the calls came in they would be enabled to liquidate all their obligations.

After some discussion, the meeting was adjourned to the 22d inst.

NORTH MINERA LEAD MINING COMPANY.

The first ordinary general meeting of proprietors, since the re-constitution of the company, was held at the company's offices, Crown-court, Threadneedle-street, on Thursday Mr. T. P. THOMAS in the chair.

Mr. C. W. THOMAS (the secretary) read the notice convening the meeting, and a statement of accounts, which showed a balance of assets over liabilities of 536*l.*, in addition to which the company had 17s. 6d. per share to call up on 4000 shares.

The CHAIRMAN, who had been upon the mine for the past few months, gave a lengthened detailed description of the various points of operation, and congratulated the shareholders upon possessing a property which he had reason to hope would speedily prove as remunerative as its rich neighbour—Minera. So encouraging was their present position, that not only had their hopes and wishes been already far exceeded, but the prospects presented justified the assumption that they would soon be brought into a position still more satisfactory. For his own private satisfaction the mine had been recently inspected by Captain Roach, who, it would be remembered, had visited and inspected the property previous to the commencement of its development by the present company, when he expressed a very favourable opinion as to the results it was likely to produce. Previous to his second inspection he (the Chairman) requested Capt. Roach to give him his candid opinion upon the property, as he wished the report for his own guidance. That report he would presently read, and he was sure it would be received with the gratest satisfaction, inasmuch as it not only reiterated the captain's previously-expressed favourable opinions, but stated the fact that his most sanguine expectations had been realised, and affirming in the most confident manner that North Minera would prove to be a lasting and remunerative undertaking. Since the re-constitution of the company the development of the property had been proceeded with most vigorously, having resumed the various points of operation which previously thereto had been temporarily suspended, and the whole of which were proceeding satisfactorily. Having referred to the important character of Pugh's and other workings, he concluded by stating that the present meeting being the first since the re-constitution of the company they had to elect directors for the ensuing year, and to appoint an auditor.

The SECRETARY then proceeded to read the report of Capt. Roach, referred to by the Chairman, which was to the effect that he was glad to find his anticipations had been realised with regard to the productiveness of various levels. Captain Roach believed North Minera would be found to be similar in stratification to Minera, and if properly conducted he had not the least doubt but that the shareholders would be amply rewarded. The sett was of great magnitude, and it was his opinion that it possessed all the characteristics of becoming a great property.

The SECRETARY then read the report of the agent, as follows:—

Jan. 8.—Since the last general meeting the cross-cut in the 35 yard level has been driven south about 3 fathoms on course of the flat, the ground being of a very promising character, and producing good stones of lead ore. Although our anticipations as regards cutting the lode in this end have not yet been realised, the flat has yielded a fair quantity of lead, and laying open ground that will give a profit for stoping away; the present end is of such an encouraging appearance, and, in addition, a little water is issuing therefrom, that I am led to believe we are close upon intersecting something important. The winze sinking below the 35 yard level has been communicated with this level, thereby affording sufficient ventilation throughout the mine, and laid open the piece of ground between the two levels in a most excellent manner for stoping away, from which large returns will be made. We have commenced driving the 35 yard level east on the course of the lode, where we have a very encouraging prospect, and have cut into the same run of lead discovered in the winze; and, undoubtedly, in a few feet further driving shall have it as productive as in the winze, which produced upwards of 5 tons per fathom. We have also holed the 25 yard level east with the old workings, thereby rendering them available for any trial thought proper; for the present we intend sinking Harrison's old shaft down upon the run of ore discovered in the winze, and now being wrought on in the 35 yard level, it being dipping in that direction; the shaft is about 10 fathoms east of the winze, and advance of the end. The stopes in the 25 yard level, east of shaft, has produced about 30 cwts. of lead per fathom; at present it is not quite so good, but I anticipate the falling off only for a short time, as good branches of lead are to be seen a little in advance of where we are working. The stope west of shaft has produced about 2 tons of lead per fathom, and presents prospects as good as ever. The 25 yard level has been driven west about 3 fathoms, the ground very disordered, and producing not sufficient lead to value; we are frequently meeting with fresh beds in driving this end, and cannot say how soon we may discover something good. The cross-cut in Thomas's level, driving to develope the gravel bed, is progressing as fast as the ground will admit, it being very hard for cutting. The cross-cut in Twll-y-Cwn workings is also progressing favourably; and, according to measurement, have only a short distance to intersect the flat; the end is letting out a little water. The cross-cut in Pugh's level is in promising ground, and easy for progress, occasionally finding good specimens of lead in the shale. The new level, driving to intersect the north and south lode, has progressed satisfactorily, but the lode has not yet been discovered, owing, I think, to the lode underlying east, and flatter than we calculated, consequently we shall have further to drive. The severity of the weather during the last three weeks has prevented us from carrying on the dressing to any serviceable extent, and, in consequence, the lead stuff has gathered considerably, and some time will elapse, after a change in the weather takes place, before all can be dressed up, as we have, according to rough calculation, upwards of 35 tons dressed and in course of dressing. The completion of the engine and other works connected therewith have also been delayed in consequence of the weather, otherwise we should now be ready for working the engine as promised, but a short time will suffice to get her to work; after the weather changes we shall also begin to erect the large crusher. All points considered, our prospects are good, and likely at no distant period to be very remunerative.—W. T. HARRIS.

The CHAIRMAN said the directors had that day made a call of 2s. 6d. per share upon the new shares, by which they estimated they would be put in funds to enable them to carry on their operations until they sold some ore. As regarded the extent of the sett, he would take that opportunity of informing the shareholders that it was three miles long and one mile broad, and in addition to the several known lodes which it contained, there were several flats, which some people thought extended all over the sett. At all events, upon one flat which they were opening there could be employed at the present time more than twenty men.

The SECRETARY then read a letter received that morning, to the effect that the lode

had been cut in the 35 yard level, driving east, which was a most important feature.—The CHAIRMAN said that Capt. Francis spoke of it "as a splendid discovery."

Mr. BATTERS thought they were greatly indebted to Mr. Thomas for the trouble he had taken in advancing the interests of the company.

The report and accounts having been adopted, the directors were re-elected, and the auditor re-appointed, Mr. T. P. Thomas being elected secretary.

It being arranged that the general meetings should be held quarterly, a vote of thanks to the Chairman was passed, when the proceedings terminated.

SILVER RAKE MINING COMPANY.

The first general meeting of proprietors was held at the company's offices, 2, Crown-court, Threadneedle-street, on Wednesday,—Mr. F. COMBES in the chair.

The notice convening the meeting having been read, a statement of accounts was submitted, which showed a balance in hand of 455*l.* 7s. 3d.

The report of the agent was read, as follows:—

Since we commenced operations here we have cleared and secured the engine-shaft to the 60 yard level, drawn all the deads, and erected suitable drawing gear. We have also cleared the ladder-way shaft to the same depth, and fixed new ladders, &c. We have discovered a swallow at the deepest part that will clear the mines of any quantity of water, and we have commenced driving on the vein, which is very promising for a course of ore, and at a short distance of driving will come under the course of ore seen to the east, and from which the men were driven by the water, but which will be drained by our present operations. The old Pantywildwr vein, which has been one of the best in Wales wherever worked, runs through the sett; we will shortly commence operations on this lode in whole ground, and good profits may be expected.—T. PIERCE.

The report and accounts having been received and adopted,

Mr. G. BATTERS explained the position and prospects of the property; and in doing so stated that the sett, being held under the Marquis of Westminster, was subject to a royalty of 1*l.* per ton. It comprised a run upon the course of the lodes of nearly a mile in extent. An engine-shaft had been sunk, which must have cost between 500*l.* and 600*l.*, in addition to which a good roadway-shaft had been constructed. All the present company had had to do was to fix new ladders, and generally clear up the mine, which he was glad to say had been done very successfully. After having explored about 20 yards they began to fear they would have experienced some trouble from the water, as from that shaft some poor men had been working for a considerable time, and raised some very beautiful lead whenever the water went down. Although those poor men, so to speak, were making little fortunes, yet they did not possess the means to fully develope the property, and hence it had been granted to the present company. It was, therefore, proposed to drive a level above 40 yards under where the former workers made such handsome returns, by which that course of ore would be unwatered; and to the west of the shaft they had a swallow, of dimension sufficiently large to take the whole of the water in the county if it were required. The property was intersected by the celebrated vein called Pantywildwr, which, he might inform the meeting, was one of the finest, if not the finest, in the country, having yielded many thousands of tons of lead, and produced large profits to those whose property it intersected. Wherever it had been found it proved to be exceedingly rich, which was a fact of the greatest importance when they knew that their sett contained that very vein, and perfectly unwrought. The lode they were now driving on they had reason to believe would form a junction in the shaft with the Pantywildwr vein in about 20 yards deeper, as at the present time they were rapidly underlying towards each other; the sinking of that shaft, therefore, was their main object, and that could be done at a cost of about 50*l.* per month.

The report and accounts having been adopted, a resolution was passed placing the company under the provisions of the Limited Liability Act, in 100 shares of 20*l.* each, credited 5*l.* paid. Mr. T. P. Thomas was appointed secretary, at a salary of 50 guineas per annum.

The CHAIRMAN suggested that the Articles of Association should be those prescribed by Table B, with one or two slight alterations—that general meeting should be held quarterly, and that a less number than that prescribed should form a quorum for the transaction of the company's business.

A vote of thanks to the Chairman was passed, when the proceedings terminated.

OLD TOLGUS UNITED MINING COMPANY.

A special general meeting of proprietors was held at the company offices, 27, Austin-friars, on Thursday, Mr. M. POUND in the chair.

Mr. WM. CHARLES (the secretary) having read the notice convening the meeting, the minutes of the last were read and confirmed.

The CHAIRMAN said the object of the special meeting was to determine upon, and adopt if thought advisable, a revised list of rules and regulations—a copy of which had been sent to each shareholder.

The SECRETARY then read the amended code of rules, which being put *seriatim*, were unanimously adopted.

That having concluded the special meeting, the ordinary business was proceeded with by the SECRETARY reading a statement of accounts, from which the following is condensed:

Balance last audit				£1150	8	8
Mine cost				1389	14	3
Merchants' bills				430	3	9
Mr. R. Tredinnick's claim in respect of 41 shares				488	11	8
Sundries				321	13	10 = £3780 12 2
Calls				£1800	0	0
Copper and tin ores sold				650	6	8 = 2450 6 8
Leaving debit balance						£1330 5 6

The report of the agent was read, as follows:—

Jan. 8.—The engine-shaft is now down 3⅛ fms. below the 72; the killas is improving in its appearance as we sink, and the lode is 1 foot wide, composed of a beautiful soft spar, and impregnated with rich spots of copper ore, but before we sink much deeper we must fix a lift at the present level, and fix 20 fms. of wood rods, after which we shall be able to sink the shaft with greater speed, and without any hinderances. We are forcing on the 52 cross-cut with all speed, and the ground is still highly charged with mineral, but the cross-cut being at a depth of 70 fms. under where the lode was seen before, in all probability it has taken a more perpendicular direction; therefore the present cross-cut now driving will have to be extended further to intersect the said lode, but we are fully satisfied from every indication that the lode is still ahead, and when intersected we have every reason to expect a course of ore, judging from its appearance at surface it cannot possibly fail. In the 52 west, on the south lode, we have a little tin, and by extending this level 5 fms. further it will intersect the engine lode, a point where we look for a great change for the better. On the south lode, in the 42 west, we are rising at present on the lode, which presents a large and masterly appearance, producing saving work for tin. As we extend this level west towards the champion cross-course we hope to lay open profitable ground. We are most happy to report to you that the features of the mine are daily improving. We have at present ten pares of tributers working on tin at fair tributes, and the men are getting good wages. We have at surface on the mine about 100 tons of tinstuff prepared for stamping, and on the tin-floors from 3 to 4 tons of black tin, but in consequence of the dressing apparatus being in bad order, we were not in a position to make the full returns of the tin stamped; the weather, also, has made against us very much, but we are making all speed possible in erecting the necessary machinery for dressing, which we hope soon to complete, when the returns of tin will be greatly increased, and before the next general meeting takes place we hope to be able to report still more cheeringly.—G. REYNOLDS, W. GILBERT.

The SECRETARY said that in the statement of accounts just submitted, showing a balance of liabilities over assets of 1330*l.*, which included Mr. Tredinnick's claim, and also the bill of Mr. Berry, the solicitor, for the expenses in connection with the proceedings which had been taken against the company in Chancery.

The CHAIRMAN thought the company were greatly indebted to Mr. Berry for the economical way he had conducted their proceedings.

The SECRETARY said an article had appeared in the *Mining Review* stating that the works were being carried on in such a dilatory manner that they could never expect success. He had not taken any notice of that article at the time by replying in the *Mining Journal* or any other paper; but for the information of the shareholders he would avail himself of the present opportunity, by taking the liberty of stating that there was not the slightest ground for such an accusation; and in substantiation of his statement he was quite willing to call in any respectable agent, and abide by his report as to the manner in which the works had been carried on—in fact, several agents had at different times been called in, who have borne testimony to the very creditable manner in which the mine was being developed. Having stated that much at the present meeting, he would take no further notice of it, but he considered it necessary to make some allusion to the fact, as he had received several letters from shareholders, who evidently by their tone had been biassed by what they had read.

The CHAIRMAN thought it was a thing scarcely worth noticing.

The SECRETARY, in answer to questions, stated that there was reason to believe, from the appearances presented in the cross-cut at the south part of the sett, that they must be near the lode, as there was issuing from that point a great quantity of water highly mineralised, and the appearance of the killas also gave every indication of being near a lode. Since they had commenced driving that cross-cut the character of the ground had very much altered, it being now the light coloured killas, which was most congenial for the production of copper ore. He was hoping that the returns for tin, which had already improved, would continue to materially increase. He was glad to inform the meeting that he had succeeded in effecting an arrangement for the stamping of all their tinstuff for one year, from Jan. 1 for 36*l.* Looking, therefore, at the quantity of the stuff on the dressing-floors, at the improvement which had taken place in the pitches, and also at the increased number of pitches, they had good reason to expect that their tin returns would be considerably increased. As regarded the lode in the south cross-cut, it was the opinion of several experienced men that that would prove the important lode in the sett.

The report and accounts having been received and adopted, a call of 2*l.* was made.

The SECRETARY further stated that the south cross-cut was 70 fms. from the surface, and that the adjoining sett had very rich returns near the surface. He anticipated they would soon get 200*l.* worth of tin per month; and he had no doubt their tin returns would gradually increase above that amount.

A vote of thanks to the Chairman terminated the proceedings.

GREAT WHEAL MARTHA MINING COMPANY.

The ordinary annual general meeting of shareholders was held at the offices, Moorgate-street, on Saturday, Dec. 29.—Mr. JAMES WRIGHT in the chair.

The notice of meeting, directors' report, and statement of accounts having been read,

A SHAREHOLDER enquired how it was that there was no mention of the proceeds of the sales of ore in the balance-sheet; which question was satisfactorily explained by the CHAIRMAN, who stated that the greater part of the ore had been sold since the period at which the accounts were made up to, and that for the first parcel sold the money had not yet been received.

In answer to another shareholder, Capt. RICKARD, the managing agent, said he could raise 500*l.* worth of ore monthly, against a cost of 300*l.*, but he would advise them by all means to sink the engine-shaft to deeper levels, by means of which the returns would be considerably increased, as the lode in the 40 was dipping towards the shaft, and at another 10 fms. in depth they would only have 10 fms. to drive to intersect it, and looking at the productiveness of the lode in the 40, where it is 16 ft. wide, producing 7 tons to the fathom, there was every reasonable hope to expect that in the next level they would be well rewarded for their outlay.

The SECRETARY then read the reports of Capt. Skewis, agent of Crelake, and Capt. Rickard, and as they both recommended the immediate sinking of the engine-shaft, and for the crusher to be at once erected, a SHAREHOLDER said he thought that, looking at the contingencies of mining, they ought to have additional capital, and he begged to propose that 2500 new shares be created, which would give them more speedy dividends.

This proposal was strongly objected to by a large holder connected with the copper trade, who said he would undertake to work the mine at a profit at once if he had it in his own hands, without requiring any further capital.

Another SHAREHOLDER said that, as the directors stated in their report to the shareholders that they had so much confidence in the results to come they did not feel inclined to recommend the raising of further capital, he thought it very strange that a shareholder should propose to act to the contrary.

No one having seconded the proposition, it was dropped.

A general discussion then took place regarding the price the ore had sold for, Mr. RAM, a large shareholder, contending that, in all probability, the ore would have realised a higher price had it been sold at a public ticketing, and he recommended that it in future be sold publicly.

Another SHAREHOLDER stated that he considered the ore had sold at a capital price, considering it was not crushed, and he thought the company could not do better than to sell their ores for some time to come on the present system, till some arrangement could be made respecting the water-power required for working the crusher.

It was eventually decided to leave the matter in the hands of the directors, for them to find the best market they could for the ores.

The following resolutions were moved, seconded, and passed unanimously:—That the accounts presented be passed.—That Messrs. Wright, Smith, Hemming, Searby, Ram, Serjeant, and Hawkins be elected directors for the ensuing year.—That a vote of thanks be given to the directors for their past services.—That in future the directors be remunerated at the rate of 1*l.* 1s. each for each attendance at the board.

A vote of thanks having been given to the Chairman, the proceedings terminated.

WEST BRYN GWIOG MINING COMPANY.

The first ordinary general meeting of proprietors was held at the company's offices, Crown-court, Threadneedle-street, on Wednesday,—Mr. F. COMBES in the chair.

The notice convening the meeting having been read, a statement of accounts was submitted, which showed a balance in hand of 455*l.*

The following report was then read:—

Jan. 5.—We have sunk and secured the whim-shaft down to the 50 yard level; at the 40 there is about 15 yards of driving eastward, and a winze sunk at the end 9 yards, and from this winze a good sized level has been driven westward towards the shaft, and by all appearances is holed through, which will ventilate the mine to a great depth, and save the present company some hundreds of pounds. The swallow is taking the water, which will save the company pumping machinery, and the lode so far as seen, is all that could be wished, composed of spar, calamine, and lead, and from 3 to 4 ft. wide. The stratum is the true bearing limestone. We shall in the course of a few days commence driving in whole ground, and important results may be expected.—JOHN LLOYD.

The CHAIRMAN having moved the adoption of the report and accounts,

Mr. G. BATTERS said that he had written to Capt. John Lloyd, of Bryn Gwiog Mine, informing him that there would be a meeting of the West Bryn Gwiog proprietors during the present week, and requesting him to forward a communication as to the state and exact position of the mine up to the last moment. Accordingly a private letter was received that (Wednesday) morning, which was of a very favourable character.

The CHAIRMAN enquired if Capt. Lloyd had any interest in West Bryn Gwiog?

Mr. BATTERS replied that Capt. John Lloyd not only held an interest, but had expressed a most sanguine opinion upon the prospects of West Bryn Gwiog, stating that had he had any idea that it was such a property he would have secured it for himself and friends. They were at present exploring a lode from 3 to 4 ft. wide, which was imbedded in a beautiful channel of white limestone. The sett was situated at the foot of a hill, so that they came into the true bearing measures very readily and inexpensively. The mine, he thought, had not been worked during the present century; in fact, not since lead sold for 6*l.* to 7*l.* per ton; and although there could be no doubt that the ore produced was exceedingly rich—indeed, it must have been so to have yielded a profit when lead was of such little value—yet, upon the slightest check, those employed ceased operations. But before doing so they had sunk a substantial and capacious shaft, and made several explorations, the advantages of which would be realised by the present company. In about a week from the present time they would be driving in whole ground, and upon one of the same lodes as intersected the celebrated Bryn Gwiog Mine.

The CHAIRMAN considered that a most important point.

Mr. BATTERS, in answer to a question, replied that their sett adjoined the Bryn Gwiog, and comprised an extent of ground of nearly a mile upon the course of the lodes.

Mr. T. P. THOMAS said one of the lodes which the West Bryn Gwiog sett contained was the celebrated Bramwell's lode, which had given to the Hendroy Company such immense returns. But the other lode, referred to by Mr. Batters, had been discovered by the present party, and proved to be parallel to the great Bramwell's lode. With regard to the dues, an agreement had been made between the company and Mr. Berrington, by which it was arranged that the dues should be settled by Mr. Petherick; but there could be no doubt they would be similar to those upon the other portion of the Marquis's property—20s. per ton. He (Mr. T. P. Thomas) said the company already possessed a tack-note upon the same terms as the other mines in the locality.

The CHAIRMAN thought the meeting were greatly indebted to Mr. Batters for the trouble he had taken on behalf of the company, as also for the very lucid and satisfactory statement he had made as to their position and prospects. The cost of developing their property was really insignificant, and the more especially when the prospects presented were considered. From all he could ascertain, they were justified in hoping that the balance in hand would prove sufficient to bring their property into at least a paying condition; and, according to the data which Mr. Batters had collected, he (the Chairman) considered they had good reason for congratulation in having been so fortunate as to secure a property which held out prospects of such an encouraging character. It was satisfactory to know that their sett was intersected, not only by the ore-bearing lodes of the district, but also by other parallel lodes, which might prove equally as productive, besides several other lodes which had not yet been proved.

Mr. BATTERS said the whole district had been sadly neglected for many years, from the time, indeed, when lead was at the depreciated price of 6*l.* or 7*l.* per ton. The attention of the investing public was first attracted to the district by the discovery in the Rhosesmor Mine, after which came the discovery in Bryn Gwiog; and now increased attention was being directed to West Bryn Gwiog, which, to all appearances, would prove as successful as any of its neighbours. The whole district, after having been in a state of dormancy for so many years, was now rousing from its inanition, and attracting the attention of all persons who were in any way connected with the mining resources of Wales.

Mr. T. P. THOMAS observed that in West Bryn Gwiog they possessed everything they could expect, and everything that was likely to yield satisfactory results. They had several large and well-defined lodes, and extensive explorations which had been made by former workers, and which, from the appearances at the surface, they did not expect to find. The ore raised must have been of a very rich character, for none of it had been left upon the surface, all having been turned into money.

Mr. BATTERS said the ores raised must necessarily have been of great value, for nothing but a very rich course of ore would in those times have paid for working.

The accounts having been passed and allowed, and the report received and adopted,

The CHAIRMAN said the next point was to consider the desirability, or otherwise, of placing the company under the provisions of the Joint-Stock Companies Limited Liability Act.

Mr. THOMAS had received letters from several shareholders advising the placing of the company under the Limited Liability Act.

Mr. BATTERS, as a large shareholder, was favourable to the adoption of that course.

The CHAIRMAN said another question was as to the subdivision of the shares.

Mr. HUGHES was opposed to the subdivision of the shares. It was to be recollected that their neighbour, Bryn Gwiog, did not divide their shares until they had reached a value of something like 150*l.* or 180*l.* per share.

The CHAIRMAN thought it would satisfy the convenience of the company generally if the shares were divided into 200.

Mr. HUGHES could not see the necessity nor advantage of placing the company under the Limited Liability Act, the more especially as their neighbours had done so exceedingly well without it. As far as he was himself concerned, he should rather prefer the company being kept as it was.

After some further discussion, it was resolved that the West Bryn Gwiog Company be registered under the provisions of the Joint-Stock Companies Limited Liability Act, that the capital should be limited to 2000*l.*, and divided in 100 shares, credited 5*l.* per share paid.

Mr. BATTERS said the objection which many people raise to placing mining companies under the Limited Liability Act was consequent upon the fact that by that Act they were required to convene a general meeting of shareholders but once in twelve months. Now, to remove that objection, and at the same time set an example to other limited liability mining companies, he would propose that their general meetings be held quarterly.

The CHAIRMAN thought it was their duty, as persons interested in mining enterprises, to introduce something of that kind, for limited liability companies, now-a-days, went dragging on—never placing any accounts before the shareholders, and only once in twelve months, and hardly then, could proprietors ascertain the position and prospects of their property. That, he considered, a fatal objection to limited liability companies, but which would be altogether removed if the proposition of Mr. Batters was confirmed—that general meetings be held quarterly.

It was then resolved that the company's general meetings be held quarterly, when a vote of thanks to the Chairman was passed, and the proceedings terminated.

ST. JOHN'S UNITED COPPER AND LEAD MINING COMPANY, NEWFOUNDLAND.

An extraordinary general meeting of proprietors was held at the company's offices, Cannon-street, on Monday,—Mr. C. P. BERKELEY in the chair.

Mr. J. C. RIDGE (the secretary) read the notice convening the meeting, stating that the object for which the shareholders had been called together was to further consider the reports received with reference to the Turk's Head and English Ridge Mines, and an amended offer which had been made for the sale of the same to the company, and to decide as to accepting such offer or not; to receive the report of the committee of inspection appointed at the last special general meeting; and to appoint two additional directors.

The CHAIRMAN said, as the shareholders knew the object of the present meeting, it would not be considered necessary for him, in the first instance, to make any observations, but thereafter he would be glad to make any remarks that the circumstances of the case might require. The most material point was to receive the report of the committee of investigation appointed at the last special meeting of shareholders.

Mr. H. ADRON (public accountant, and one of the committee of inspection) said that, having been appointed one of the committee, he had put himself to some little trouble in investigating the books of the company. He believed there was not an item in any of the books, either in the ledgers, or journal, that did not bear his mark. He then proceeded to read his report, which was to the effect that he had gone through the books, and that the accounts submitted to the shareholders was a correct statement, and that which he had drawn up differed in form only from the one then submitted. He had never found a more perfect system of book-keeping in any public company, and one more efficient could not possibly be devised; if at all open to criticism, it was upon the score of excessive elaboration in its details. The surplus assets would be about 1700*l.*, after allowing 1500*l.* for bad bills. He suggested that payments in respect of shares should henceforth be made in cash. Notwithstanding the opinion of an eminent mineralogist to the contrary, he believed it was desirable that the company should prosecute the property with vigour, and that opinion was formed,—1st, from the favourable reports of Capt. Hooper and Mr. Gisborne; and, 2d, from the specimens of ore at the offices of the company. Mr. Gisborne had expressed his willingness to work the mines for a stipulated period, at such an amount as would guarantee the shareholders against any possibility of further calls,—that is to say, supposing the running bills representing shares were paid. He further suggested that an addition should be made to the direction of three members, and that an official auditor should be appointed. In conclusion, he referred to the valuable assistance rendered him in the course of his investigations by the directors and manager, and also his coadjutor, Mr. Jones.

A SHAREHOLDER enquired if that was the report of the committee?

Mr. ADRON replied that the document just read was his own report. The committee had not worked unanimously together; and finding that the interest of proprietors was likely to suffer, he had taken upon himself the investigation of the books, and the report he had just read was the result of his labours.

Mr. TIETKINS then submitted his report, which, with the various appendices, occupied considerably more than an hour in reading. Having stated that the company being established he would not enter upon the question of its origin, he alleged that the directors had not been properly qualified, and that, therefore, the whole of their actions were null and void. He complained that the terms of the prospectus had not been implicitly obeyed. One of the liabilities set forth in the balance-sheet was a sum of 203*l.*, said to to be due to Mr. Petherick; he had repeatedly requested to inspect that document, but had not been allowed to do so. There were no particulars of memorandum relating to it, and it was necessary to know whether that claim was for services rendered to the company, or before the company was formed. Those gentlemen who had acted as directors, being without the qualification, and, therefore, quasi-directors, had no right to take possession of and expend the company's money. He required some explanation why, Mr. Petherick's report being received in July, shareholders were not called together till December, when all the money was expended? And why, notwithstanding the discouraging character of that report, the directors had perseveringly determined to expend the company's funds? He had called upon the directors for specific materials, that he might fully investigate the company's affairs, but they had declined to furnish him therewith. Nearly the whole of the cheques had passed over the bankers' counter, and not through the bankers. With regard to the reports of his coadjutors, all he could say was that he had preferred giving the result of an examination of the books and papers rather than give a detailed expression of opinion; upon which he proceeded to read extracts from the directors' minute-book, also from letters which had been written during the investigation.

Mr. JONES then read his report, concurring in the opinion of Mr. Adron with regard to the balance-sheet, to the clear and lucid accuracy of which he begged to add his testimony. He also agreed with Mr. Adron with regard to the prospects of the company. He had carefully investigated the various transactions of the directors, and he did not find that any act of material importance could be urged against them as exceeding their duties. There was no act or transaction on their part which could be considered as a reproach against them as men of honour and character; and he entirely agreed in the desirability of carrying on the company. It was but justice to add that the feeling of the Messrs. Gisborne had been such as to deserve the best thanks of the shareholders.

Mr. ADRON did not wish to say one word about Mr. Tietkins, but he most positively and distinctly denied his statement that the accounts were false. He (Mr. Adron) would reiterate his opinion that there was not a single figure in that balance-sheet that could not be fully verified. As a public accountant, he gave it as his opinion that the books were a perfect specimen of good book-keeping, and he ventured to say that there was not a public company in London that could show such books. If the directors had been somewhat careless in expending the company's money,—which, by the way, they denied,—shareholders had a perfect right to blame them for it; but the thing having been done, let them look at the matter like men of business, and not pursue a course whereby their property will be sacrificed.

The CHAIRMAN said the directors were quite prepared to go into every point alluded to in Mr. Tietkins's very lengthy report. But he might state that some short time before the general meeting Mr. Tietkins called at the company's offices, and received from the board a great deal of information, many of the items referred to in that report having been pointed out by him (the Chairman). Mr. Tietkins had occupied the meeting a very long time, and he (the Chairman) was sorry that in his report several reflections were made. All he (the Chairman) could say was that if the board had agreed to the arrangement proposed by Mr. Tietkins, such a report would never have been presented,—his proposition being that the board should give him (Mr. Tietkins) a cheque for the amount he had subscribed, in return for which Mr. Tietkins would give the company an acceptance.

Mr. TIETKINS: I deny it, Sir.

The SECRETARY: I will swear it, having been present when the proposition was made.

The CHAIRMAN: I am positive, Sir, that you said—"If you will place me in the situation of those other gentlemen, by taking my bill, I will go away satisfied."

Mr. TIETKINS: I deny it, Sir, *in toto*.

The CHAIRMAN: That was distinctly proposed to us, I will pledge my word. Mr. Tietkins had been treated with the greatest courtesy by the board, and he thought they ought to have been made acquainted with the character of his report, in order that they might be prepared with an answer. It was very difficult to go into every item of account without having made some preparation. He was quite satisfied, from the testimony of Mr. Adron, who was a public accountant, that the accounts were perfectly correct.

Mr. TIETKINS said they had appointed a board of directors to dispose of their funds, and they had never been legally qualified to fill that position.

The CHAIRMAN believed the point was this:—In the first instance, the Articles of Association appointed certain gentlemen directors, who were directors to all intents and purposes till they were discharged by a general meeting,—it did not signify whether they were qualified or not; and, looking at the Act of Parliament, he contended that everything had been legally done. If they had committed any *laches* they were bound by them.

Mr. TIETKINS said the amount subscribed (4017*l.*) had not been paid to the company's bankers.—The CHAIRMAN said the whole of that sum, with the exception of a very small amount, had been paid into the company's bankers.

The SECRETARY said that Mr. Tietkins had represented everything in the worst possible light. Mr. Tietkins had asked for no explanation of the facts, and when given he had refused to accept them. Immediately after Mr. Tietkins had been appointed one of the inspectors, he there and then showed a disposition of acting in every discourteous and obnoxious way. On the first day he enquired for the minute-book, and after looking at it for a few minutes he said,—"This book has been tampered with." He (the secretary) said he would send for the other inspectors, for he would not be subject to such insults; and soon after Mr. Tietkins found that he had turned over two leaves instead of one. The whole of his report had been drawn out with an intention to mislead. Mr. Tietkins, finding that the directors would not accede to his proposition to return his money, took an opposite course, and found fault with all that had been done. With regard to not calling a meeting immediately after the reception of Mr. Petherick's report, all he could say was that soon after that inspection took place letters were received from Newfoundland, to the effect that there had been discovered a continuation of the lode, which was all that Mr. Petherick wanted to see; and the reason the meeting had not been called earlier arose from the fact that they had expected Mr. Petherick would re-visit Newfoundland on his way home to England. The meeting was, therefore, deferred, but with the consent of the best money shareholders.—Having replied to the other allegations contained in Mr. Tietkins report, a lengthy discussion ensued, when

Mr. TIETKINS having entered a protest against all the proceedings of the company, declaring them to be null and void, upon the ground that the affairs had been administered by persons not legally constituted, the meeting was adjourned to Monday, the 14th inst., at twelve o'clock.

GREAT NORTHERN (S. A.) COPPER MINING COMPANY.

The first annual general meeting of proprietors was held at the London Tavern, on Jan. 3. Mr. CHARLES BONNEY in the chair.

The MANAGER having read the notice convening the meeting, the directors' report (which was published in the *Mining Journal* of Dec. 29) was taken as read.

The CHAIRMAN said—Before moving the adoption of the report and accounts, he thought it necessary to give a sketch of the proceedings of the company since its formation. The object of the directors was, of course, to commence operations as soon as possible, consequently, Mr. Finke was dispatched to the colony, he having been engaged for one year as local superintendent. Mr. Finke left London by the January mail, but before he had arrived in the colony, and, therefore, before any account of his proceedings had been received, representations were made in England unfavourable to the company. As they were all aware, a letter appeared in the *Times*, signed "A South Australian," soon after the company had been formed, attacking the whole affair. Upon the arrival of that newspaper in the colony the local press took up the cause, taking an opposite view to that which they had done six months previously. The directors felt some anxiety upon the subject, and they considered it absolutely necessary that some person interested in the company's welfare should go to the colony, inspect the property, and set the local committee into active operation. At the request of his co-directors, he (the Chairman) undertook that duty, and left England by the May mail, and arrived in the colony on July 4. Within a few days after his arrival the first report from Mr. Finke was received. At the time of Mr. Finke's arrival in the colony, in March, it was suffering from the most severe drought that had ever taken place since the colony had been occupied, which would account for the delay in commencing operations, for Mr. Finke did not arrive at the mines until the end of June. In fact, upon his (the Chairman's) arrival on July 4, Mr. Finke had been at the mines about six days, and during which time he had raised 30 tons of ore from a place where there had never been a pick stuck in the ground before, and in fourteen days he expected to raise 100 tons. Upon the receipt of that report, which was most satisfactory, he (the Chairman) commenced a tour to the mines, in company with Captain Alfred Phillips, a gentleman who has been recommended to them, and who had a reputation in England as well as in the colonies. Having performed their tour of inspection, Capt. Phillips wrote a report, which was published, and which substantially confirmed Mr. Finke's previous report, published in the prospectus. He might say that Mr. Finke was a man of the greatest candour, the description of the property which appeared in the prospectus being as perfect as it well could be. Mr. Finke had given nothing but a candid statement; and the fact was that many persons in condemning the prospectus had got into their heads some peculiar notions, without ever having read that prospectus; but he was glad to find that Mr. Finke and Capt. Phillips concurred in bearing out the accuracy of all that had been put forth in the prospectus, refuting at the same time the assertions made against the company's property. Upon his return to Adelaide from the mines he found the local committee in active operation. He also communicated with the Government with regard to the obtaining of the leases upon more favourable terms, which he hoped would be acceded. The last reports received from the colony show that the Government are disposed to make the company an offer upon more liberal terms than were contained in the present leases. The new regulations proposed by the Government would be retrospective: that was distinctly understood; and there was a hope that the company would even have the right to purchase the mines at a fixed sum. As to the claim which had been set up by a brother of Mr. Chambers, one of the vendors of the property, to an interest in one of the mines included in the deed of purchase, such a strong opinion had been expressed by their solicitor that the claim was utterly untenable, that he would not go further into the matter unless some questions were asked upon the subject. He could not see that any question could possibly arise upon that subject. The section was sold to the company by Mr. Finke, and Mr. James Chambers was quite aware of the whole arrangement. Mr. Chambers was a member of, and sat at, the local board at the time, and was a party to the expenditure of the company's funds upon that section: and, therefore, he (the Chairman) could not see how Mr. John Chambers could support his claim. If he had any claim upon his brother they must settle that between themselves. With regard to the means of communication from Port Augusta, the port of shipment to the mines, he had presented a petition to the Legislature to grant some concessions to form a tramway, when the Government intimated that, if they left the matter in their hands, they would themselves bring forward resolutions, since which resolutions had been unanimously passed by both Houses to the effect that Government would grant two square miles of land for every mile of tramway used, all being most anxious that the mineral and pastoral resources of the colony should be fully developed. As regarded the prospects of the undertaking, all he could say was that the reports which had been received recently were even of a more favourable character than those already published; for instance, they had received advices that at the valuable section to which he had already referred, where there was already ore in the greatest abundance, the lode had been cut at a lower level—to use the words of the report, "thus multiplying its value." Already there were 1000 tons of ore in sight, which had been laid bare in one month by ten men. The mine was situated upon the ridge of a very steep hill, and, the lode cropping out just at the crest of the ridge, they were able to develope their property by merely driving levels from the side of the hill, shafts not being necessary. Therefore, in that particular, they possessed an immense advantage over the mines in the colony, and by which a great saving would be effected. There was an abundance of ore, and its richness was testified by the samples he had brought home—and which were not picked specimens—having upon assay yielded respectively 82, 71, and 34 per cent. of copper. Each was a fair average sample of the ore, having been picked up as they lay upon the ground. Having observed that he would be most happy to answer any question that might be put, he concluded by moving the adoption of the report and accounts.

MAJOR HUMBY, in seconding the resolution, animadverted in strong terms upon the course of conduct pursued in the colony towards the company. After the official letter in the prospectus from Mr. Dashwood, shareholders had a right to conclude that what the Colonial Government did was in good faith. The company had been unfairly treated in the colony, and under those circumstances its credit was rather brought into question. (Hear, hear.) Having read an extract from the letter in question, the hon. proprietor proceeded to say that after the publication of such an official letter they had a right to

conclude they were acting with honourable persons; but some persons in the colony, by one subterfuge and another, had attempted to destroy the market value of the company's property, which the English public had advanced money to develope. With regard to tramways, he found by their deed they had power to construct them; but, as for the construction of a tramway additional capital would be required, it would be imperatively necessary before even contemplating that expenditure, that they should be insured against the recurrence of such anomalous conduct on the part of some of the officially honourable persons in the colony. Without using any harsher term, he could not refrain from saying that the company had suffered from a course of the most disgraceful conduct; and there could be no doubt, if such proceedings were persisted in, the public of this country would accept with the greatest diffidence any South Australian securities. He referred to the conduct of Mr. Hart and Mr. Hughes, and to the letter of Mr. Dashwood; and all he could say was, that after the whole of the capital had been subscribed in about four days,—and four times as much would have been put down had it been required,—that the company had been most shamefully treated. (Hear, hear.) With reference to their deed, there could be no question that the property upon which the two several discoveries were made was referred to in the indenture, and included in the deed of purchase.

The report and accounts were then unanimously received and adopted.

Mr. PALGRAVE then proposed that the auditors, Messrs. D. A. Rivolta and J. Trenow, receive 10 guineas for their past services, and that they be re-appointed; which having been seconded by Mr. EFFINGHAM WILSON, was put and carried unanimously.

The auditors having respectively acknowledged the compliment,

Mr. FENN (of the Stock Exchange) thought the meeting would be very unwilling to separate without acknowledging in some substantial manner the services rendered by Mr. Bonney in having proceeded to Australia in order to set at rest the question which was then causing the greatest uneasiness. He (Mr. Fenn) was somewhat diffident in naming the amount. He wished, in the first place, to ascertain the feeling of the meeting upon the subject, and would, therefore, propose some remuneration.

Capt. HARRIS having seconded the resolution,

Mr. DONALDSON suggested that Mr. Fenn should kindly mention the amount, as he appeared to have given some attention to the subject.

Mr. FENN then proposed that Mr. Bonney receive 250*l.* for his six months' services; which, being put, was carried unanimously.

Mr. DONALDSON said the board fully concurred with the meeting in thinking that some remuneration ought to be given to Mr. Bonney, who had refused to take anything from the board: leaving it an open question, limiting it to his expenses.

The CHAIRMAN having acknowledged the compliment,

Mr. SILOUS (Chairman of the committee of the Stock Exchange) said, from the sample which had been seen, he thought there could be no doubt as to the richness of the mines; but the question he wished to put was as to the carriage of the ore from the mines to Port Augusta. He wished to know what mode of transit was advocated, and what they contemplated would be the cost of carriage?

The CHAIRMAN said the present means of transit was by the ordinary means—bullock drays, although they had a few horse drays. The company's contract price was 5*l.* 10s. per ton, and he was glad to see by the last advices that the 100 tons of ore to which he had referred had been brought down to the port in about six weeks. He had not the shadow of a doubt but that the mines could be worked to a profit with the present means of transit, but that profit would be considerably increased by means of a tramway.

Mr. COPE (of the Stock Exchange) had no doubt there would always be found ample cartage for any snpply of ore raised. It was true the Burra Burra had conveyed their ore to the port for a smaller amount, but then they paid a freightage of 4*l.* 10s. to London, whereas they (the Great Northern) only paid 1*l.* per ton, and their ore was of a much higher percentage.

The CHAIRMAN, in answer to a question, stated it was about 112 miles from the port to the mines.

Major HUMBY suggested the propriety of employing a traction engine.

The CHAIRMAN said the directors had been considering the matter.

Votes of thanks to the Chairman, directors, and manager having been accorded, the proceedings terminated.

[There seems to be no doubt as to the quantity of ore obtainable from the mines; the only question appears to be whether (when the whole of the setts shall have been in active operation) sufficient cartage accommodation will be procurable to take it to the port; and the evidence given before the Committee of the House of Assembly on the Great Northern Mines by Mr. Ayers, the secretary of the Burra Burra Mining Company, at once sets this matter at rest. Mr. Ayers says:—"It it were once known that cartage was to be had in large quantities and constant work, prices would soon be reduced to equivalent rates as to the Burra. At first there was great difficulty about cartage to the Burra, but when once it was fairly opened prices soon came down. The average price on the Burra road, I think, is about 2*l.* 10s. for 100 miles; that is, about 5d. or 6d. per ton per mile; and I have no doubt you will eventually get it done in the North, at all events, for from 6d. to 9d. when once the road is open. We have carted thousands of tons for 50s. per ton for 100 miles, and we have sent much up for 25s., which is only 3d. per mile. If they (the Great Northern Copper Mining Company) find they have a great quantity of ore, their least difficulty will be getting it down. I look at that as the least difficulty. If the ore is there, and of good quality, I do not apprehend the slightest difficulty in carting."]

FOREIGN MINES.

PONTGIBAUD.—W. H. Rickard, Jan. 3: Roure: The 40 metre level, south of Agnes' shaft, on Agnes' lode, is producing 1½ ton of ore per fathom, for the width carried in the level, which is 4½ ft.; the part standing seems to be the richest from the few holes we have blasted in it; we shall take it down to its whole width as soon as we can draw through Agnes' shaft; the lode where being undercut in the adit, north of shaft, is 4 ft. wide, worth 1⅛ ton of ore per fathom; this shaft is looking tolerably well, and those about Rickard's shaft, in the 40 and 20 metre levels, are improved. Our pitches are on the increase—we have 18, varying in price from 75 to 150 frs. per ton of 50 per cent. ore.—Rosier: The sinking of the Petit Pints goes on slowly, there being much water since the late rains. Nothing new in the cross-cut east in the 60 metre level. The tribute is without alteration.—La Grange: The driving of the 20 cross-cut west from Nosky's shaft is commenced, and we hope in about 3 metres more to cut the lode at the point, where we may expect an improvement in our prospects shortly. Our stopes are producing fairly; they are three in number, worked by ten men.—Miocho: The 60, north of Taylor's shaft, on the No. 3 lode, is in ground favourable for exploring, producing stones of ore. The same level south is suspended for the time, and the men put to cross-cut No. 2 lode, north of shaft. The No. 2 lode, in the 60 north, is 12 ft. wide, bespangled with ore throughout, worth ¾ ton per fathom. The 40, south of cross-cut, on the No. 2 lode, has been holed to the same level north of the shaft. The 20, north of Taylor's shaft, on No. 3 lode, is in disordered ground—poor. The adit cross-cut west is in favourable ground for driving; no lode or branch yet met with. Our stopes in this mine are not so good as in former months. Our tribute is a little improved.—Barbecot: The 35, driving north from Leontine's shaft, is without alteration. The 20 north, on Barbecot lode, produces stones of ore—not enough to value. The 20 south of cross-cut, on the side lode, is also producing occasional stones of ore; lode 1¼ ft. wide. The adit, south of the flion Rouge, is in ground more favourable for driving; the lode is about 2 ft. wide, with spots of ore and blende.—Pranal: The 20 south, on Felix lode, is suspended. The stope in back of the Armantine lode, in the 70 south, is about 2 ft. wide, producing stones of ore, with barytes and blende. The same level north of junction, on Felix lode, is producing ⅛ ton of ore per fathom. The 50 south is favourable for driving. The 30 north, on Felix lode, is about 1 ft. wide. The Nos. 1 and 2 rises, north and south of Bontoux's shaft, on Felix lode, are laying open ground that will work at a moderate tribute.—Argentelle: There is no change to mention in the adit west on the tin lode; we are still cross-cutting in search of the northern part of it. The surface-works during the past month have made but little progress; in a part of the month we were hindered by the severity of the weather, and since the thaw, which began on Dec. 25, we have had continual rain, which has increased our water underground also. Our samplings for the month amounted to 188½ tons, dry weight.

WEST CANADA.—W. Plummer, Dec. 1: Copper Bay Mine: The lode in the level west of the new shaft continues much the same, yielding about 2½ tons of copper ore per fm.; the level, however, is slow of progress. The lode in the level going east of this is large and orey, yielding 3 tons per fm.; our progress here is more favourable. The lode in the level west of Palmer's shaft is orey throughout its whole width (14 ft.), and will yield 4 tons per fathom. Palmer's shaft contains a good lode, and will yield at least 5½ tons per fm.; the lode maintains its size, and the progress of sinking, considering the great quantity of water, is as much as we can expect. The winze below the 8, west of Bray's shaft, is rather slower for sinking, principally on account of the water. We have not yet been able to apply the engine for hauling water to all our shafts on Copper Bay, but we shall do this as soon as circumstances allow. The lode in this winze is a little improved. We have a pretty good lode at each end of the winze, but the dyke on which we are sinking prevents the ore from coming into the centre of the winze; we shall, if possible, push on the sinking to a good depth. The level driving west yields about 2 tons of ore per fm. The lode in the stope to the east of Bray's is small, but pretty good, and yields 3 tons per fm.—Wellington Mine: The stope east of Grenfell's shaft is yielding from 2 to 2½ tons per fathom. The lode is not quite so large as we advance eastwards, but its produce is much the same. The stope to the west of ditto is a little improved, and yields 2 tons per fm. The lode in the level going west of Crase's shaft is not rich, but it contains a little more ore than it did, and we are always hoping for further improvement. The stope to the east of Michell's shaft yields about 2 tons per fm. The stope to the east of Rowe's yields 2½ tons per fm., and the stope to the west of ditto about 2 tons per fm. The stope east of Jennings' shaft yields about 3 tons per fm. The stopes to the east and west of Knight's shaft, on Fire lode, are very good; the lode is not large, but it yields a good supply of ore. The stope west of Grenfell's Fire lode is improving for ore, and can also be wrought cheaper than heretofore. The level going west of Colling's shaft is a little improved for ore; the lode is looking more promising than I have seen it for some time, although it cannot as yet be reckoned of much value. During the past month we dressed from both locations 160 tons of copper ore. The machinery and all other operations are going on satisfactorily and are in good working order.

SOUTH AUSTRALIA.—On Monday, the 14th instant, at half-past eight p.m. at Burlington-house, the following paper will be read by Mr. John Macdougall Stuart:—"Journal of his Expedition Across the Centre of Australia, from Spencer Gulf on the south, to latitude 18° 47 min. on the north;" communicated by Messrs. Chambers and Finke (the discoverers of the Great Northern Mines), through Sir Roderick I. Murchison, Vice-President of the Royal Geographical Society.

MINE ACCIDENTS.—At Carn Brea Mine, on Dec. 21, James Bosanko was injured by a fall of stone in the shaft, and died from the effects on Jan. 1. At the inquest on the body, a verdict of "Accidental Death" was returned.—— At Penhale mine, on Jan. 4, Francis Chynoweth was killed in a rise at the back of the 20; it is supposed from the shock of a blast having caused violent congestion of the brain. The surgeons who examined him when he was brought to grass declared that there were no marks of violence, but he was in a state of coma. He was let blood, but never rallied, and died the following morning. A verdict of "Accidental Death" was returned.

FOGS AND FROSTS.—One of Dr. Locock's pulmonic wafers, taken two or three times a day, relieves the most violent cough, and protects weak lungs from all the irritation of fogs and frosts. They have a pleasant taste. Price 1s. 1½d., 2s. 9d., and 11s. per box. Sold by all druggists.

HOLLOWAY'S OINTMENT AND PILLS—COLDS, SORE THROATS.—The winter in our climate is always attended by more or less irritation of the throat and chest, and immediate care and attention are required to avert worse evils. Holloway's pills and ointment may be used by all persons in all stages of these complaints with efficiency and safety. The pills should be freely taken internally, and the ointment should be briskly rubbed on the glands of the neck and top of the chest twice a day at least, until all inconvenience pass away. They soon allay the irritability, remove the feeling of oppression, and regulate the circulation of the blood. They expel all morbific matter, and purify every solid and fluid in the body.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—T. Hosking, S. Uren, Jan. 9: The main lode in the 150 and 140, east of Davey's engine-shaft, is without any material change since last report. The 130 in this lode, east of said shaft, has rather fallen off in value, occasioned by a branch passing it. We are of opinion that this change is only temporary, the lode being still 6 ft. wide, worth 25*l.* per fm. In driving a cross-cut north, 8 fms. behind this end, we have intersected a branch 9 in. wide, worth 6*l.* per fm. We have just commenced to drive east and west on its course. No. 4 stope, in back of said level, is worth fully 30*l.* per fm. The rise in the back of the 120, east of the above shaft, on the north part of the main lode, has improved in the past week, now worth 15*l.* per fm.

ASHBURTON UNITED.—W. Edwards, Jan. 7: The shaftmen have completed cutting tip-plat and cistern-plat at the 67, and put in penthouse; they are now cutting bearer holes for fixing the standing lift; after this is completed the sinking will be resumed with all possible dispatch. Friday last being our setting-day, the following are the particulars:—The 67 end to drive east, by four men, at 5*l.* 10s. per fm.; no lode has been taken down in this end during the last 3 fms. driving, but we shall do so in a few days. This level west to drive by six men, at 11*l.* per fm.; no lode has been taken down for the last 8 ft. driving. The cross-cut in this level to drive south, by two men, at 6*l.* per fm.; the ground here is improved, and more water coming from the end; from this indication, and the distance driven, I presume we are near the No. 3 lode. The deep adit level to drive south at Teague's, by four men, at 5*l.* 10s. per fm. In the tribute department we have set three new pitches in the back of the 67—viz., two at 6s. 8d. and one at 4s. 6d. in 1*l.* There are 14 pitches let in the levels above, at from 3s. to 15s. in 1*l.*

BALLYVIRGIN.—D. T. Macdonald, Jan. 3: The west cross-cut from north end is driven 10 ft., the ground is without any change to notice.—South Stope: This stope is worth fully 10 cwts. of lead ore, and 4 tons of plain mundic per fathom, with occasional stones of copper ore.—No. 2 Stope: This stope will yield about 8 cwts. of lead, 2 tons of coppery and 4 tons of plain mundic per fathom.—No. 3 Stope: This stope is worth 8 cwts. of lead, 1 ton of coppery and 4 tons of plain mundic per fathom.—Dressing Department: We have dressed and put to pile 1 ton of lead ore, 4 tons of coppery and 10 tons of plain mundic, and prepared for the crusher 3 tons of lead ore.

BEDFORD CONSOLS.—Capt. Mitchell, Jan 10: Saturday last being our setting-day, the following bargains were let:—The middle adit level to drive east, on north lode, by four men, at 3*l.* 5s. per fm.; stented 3 fms. To drive east, on No. 1 south lode, by six men, at 10*l.* per fm.; stented 1 fm. In consequence of the hard bar of ground at this point the lode is become very small, but it contains strong mundic and copper ore. The cross-cut to drive south by four men, at 6*l.* per fm.; stented 1 or 2 fms. There has no more lode been met with at this point since last report, but within the last few days the end has become very wet, and I am inclined to think the main part of the lode is still in advance of the end. The tributers' pitch in the back of the 27 is improved, and the men are getting wages; all the tramming in the mine for 1 month, at 7s. per fathom.

BEDFORD UNITED.—J. Phillips, Jan. 8: The lode in the 148 west is 2 feet wide, composed of spar, mundic, and stones of ore. The lode in the 115 west is large, yielding good stones of ore, and promising for further improvement. We are driving by the side of the lode in the 103 west; the stopes in the back of this level are worth 5⅓ and 3 tons of ore per fm. The lode in the 90 west is 18 in. wide, composed of spar, mundic, and stones of ore; the stopes in back of this level are worth 4 tons of ore per fm. We are opening out good tribute ground in the 58 east. The winze in the 47 east is communicated with the 58 east; we have also cut out good tribute ground in this winze.

BENEATHWOOD.—J. Lean, Jan. 10: The engine keeps out the water very well, and the sumpmen are working with good spirit. The shaft is down nearly 2 fms. below the 30. Other operations are also progressing satisfactorily.

BICKLEIGH VALE PHŒNIX.—J. Hambly, Jan. 10: The monthly pay-day at the mine went off as usual, the managing director being present. I have nothing new to report in the adit driving. I have commenced clearing out the sawpit for the purpose of developing the copper lode, as well as opened two new pits. The eastern pit near the gate-way of the Oatfield is about 2 fms. in loose broken ground, but to-day we have touched on a branch or lodey stuff underlying a little north. We shall now sink away on this, and let the walls stand, which will show its underlie; it is composed of white prian and a little spar; not much gossan yet. The next pit, about 10 fms. further west, is down about 10 ft.—in this we have also something of a lodey nature, with white strings and branches, and spar; this appears to be underlying south at present; we shall sink on it, and see how it will look further down, but the hill is so broken near the granite that we must go deep to find the lodes settled. I will write again on Saturday, and let you know more about it, by that time the lode may be more defined as we go down.

BREA CONSOLS.—C. T. Craise, Jan. 5: Trevesa engine-shaft is being sunk below the 30 fm. level with all speed. The ground continues much the same as regards its softness. On Dec. 28 the following bargains were set:—The 20 fm. level to drive east, on the Redwork lode, was set to four men, at 13*l.* per fm.; lode 18 in. wide. No alteration since my last. The 30 fm. level to drive east, on the same lode, was set to four men, at 12*l.* per fm. The lode in this level has considerably improved during the last week, it is 3 ft. wide, worth 7*l.* per fm., and has every appearance of a still greater improvement. The winze sinking below the 20 fm. level, for the purpose of ventilating the 30, was set to six men, at 15*l.* per fm.; lode 3 ft. wide, worth 15*l.* per fm. The rise in the back of the 20 fm. level, on Thomas's lode, was set to four men, at 16*l.* per fm., lode worth 30*l.* per fm. The rise in the back of the 20 fm. level, on Wheal Mathew's lode, west of cross-course, was set to four men, at 11*l.* 10s. per fm., worth 20*l.* per fm. In the winze (sinking on the discovery made last month) in the bottom of the 20 fm. level, east of Wheal Mathew's shaft, on Wheal Mathew's lode, we have sunk 4 ft. 7 in., which produced 22*l.* 12s. worth of tin, and still looks well. The great quantity of rain that fell in the early part of last month stopped our underground operations for about a fortnight, and necessitated us to clear the deep adit level; though this work was tedious and expensive, it will more then compensate us for the outlay. The engine can now keep the water with ease. Had not those circumstances occured our month's sale of tin would have been 3 tons, as it is, it will be about 2 tons. The 16 heads of stamps are in full work. Our tribute ground continues much the same. The number of persons employed is as follows:—On tutwork, thirty-seven men and one boy; and on tribute, fourteen men and three boys: making a total of fifty-one men and four boys working on course of lodes, and thirty-two persons besides, such as kibbie-fillers, landers, engineman, smith's, carpenter's, tin dressers, &c., making a total of eighty-seven.

BRYNTAIL.—James Roach, Jan. 9: North Lode: The lode in the 10 east is 2 ft. wide to-day, worth 18*l.* per fm. for lead ore. The winze below this level is still worth 30*l.* per fathom for lead ore. The average value of the stope in the back is 18*l.* per fm.; this I am compelled to suspend until we effect a communication with the shaft, when we can place eight or twelve men to stope.—Bryntail Lode: The stopes under the 25 fm. level are producing 9 or 10 cwts. of ore per fathom.

BULLER AND BASSET UNITED.—G. Reynolds, Jan. 10: The lode in the shaft is still from 3 to 4 ft. wide, impregnated with rich copper ore and mundic, and still of a most masterly appearance. In the 80, both east and west, the appearance of the lode is much the same as for some time past.

CAMBORNE CONSOLS.—Wm. Roberts, Jan. 8: The following tutwork bargains were set on Friday last:—The 50 to drive east on the caunter lode by four men, at 6*l.* per fm. The 50 cross-cut north by four men, at 5*l.* The 20 west, on the silver lode, by two men, at 5*l.*; and the adit west, on ditto, by two men, at 4*l.* per fm. In the 50 east, on the caunter, 2 fms. 4 ft. 9 in. have been driven in the last month, from which, I believe, we have raised nearly 40*l.* worth of ore; in the present end the lode maintains its size—nearly 1 ft. wide, producing about ⅓ ton of ore per fm.

CAMBORNE VEAN.—Wm. Bawden, N. Clymo, Jan. 9: South Lode: The 232 east, 3 fms. east of sump-winze, is worth 15*l.* per fathom for tin, the lode being 4 ft. wide as far as we have seen it. The 190, east of new shaft, is producing some good work for tin. The rise in back of the 180 east is worth 10*l.* per fm. for tin and copper. In the 140, west of new shaft, the lode has since the last account been worth 20*l.* per fm., but at present is not looking quite so well; still it is now opening good tribute ground. We are getting on very well with the skip-road, and hope by the end of the month to have 150 fms. put in, and by the next account to have commenced driving through it from some of the levels.—Middle Lode: The lode in the 180 has recently improved, but not having cut through it we cannot say its value; but as far as we have seen it is a good lode. We expect to hole the winze from the 33 to the 56 in a few days, which will open out some good ore ground.—Main Lode: In the 150, on this lode, we fancied the old workers had missed the main part of it, and had been driving on a branch; we have put two men to cut through it, and have found the main part to be standing to the south, which we have commenced to drive on, and it is now, judging from present appearances, a most promising lode, worth for copper 15*l.* per fm. The mine is, on the whole, opening very satisfactorily, and fully up to our expectations.

CARADON CONSOLS.—W. Rich, Jan. 8: We have driven through the hard bar of ground in the 54 cross-cut north; the granite in the present end looks favourable for copper and is easy for driving; we are forcing on this end by six men as fast as possibe, and I hope we shall make good progress here in future. The main lode in the 54 east is very regular and well defined, and carries good stones of ore, intermixed with fluor-spar, peach, prian, and mundic; this is as kindly-looking a lode as can be seen without its being a course of ore. The main lode going west seems to be increasing in size; it is now 2 feet wide, composed of good gossan and spots of ore. There is nothing new to notice in the 54 cross-cut south.

CARMARTHEN UNITED.—R. Sanders, R. Toy, Jan. 7: The 32 south is still looking very promising, producing occasionally some lumps of lead. The 32 north is still producing 25 cwts. of lead per fm. The winze in bottom of the 22 is still producing 1 ton of lead per fm., but owing to the quantity of water in it our progress in sinking is rather slow. The tribute pitches throughout the mine are producing fair quantities of lead. We have had another fall of snow, accompanied by severe frost, which has entirely shut up our dressing operations, but through great attention to the pumping-wheel we are still able o keep the mine free from water.

CEFN BRWYNO.—Jan. 9: The frost has prevented our doing anything in the bottom levels since my last report. The water is now up to the 68. The lode at the 56 or deep adit level, going east of Taylor's shaft, is 2 ft. wide, with promising appearance, yielding at times good stones of ore; this level is being pushed on by four men. The tribute pitches in the upper part of the mine are without alteration to notice. The dressing is all at a standstill at present.

CWM ERFIN.—Jan. 8: The lode in the 57, east of drawing-shaft, is 4 feet wide, containing clay-slate, quartz, branches of blende, and lead ore, yielding of the latter about 8 cwts. per fathom. The lode in the stopes over the back of this level, about 90 fathoms east of the drawing-shaft, is 2 yards wide, yielding ⅓ ton of lead ore per fathom. The 45 level, going east of the cross-cut, has slightly improved during the past week; lode 4 ft. wide, producing from 15 cwts. to 1 ton of lead ore per fathom. The lode in the 45, going west of the engine-shaft, is 3 feet wide, containing a dark-coloured slate, spots of copper ore, and lead ore. The lode in the stopes over the back of the 45 fm. level, 80 fathoms east of the cross-cut, is 5 ft. wide, yielding ⅓ ton of lead ore per fathom. The lode in the stopes over the back of the same level, 55 fathoms east of the cross-cut, is 2 yards wide, yielding 15 cwts. of lead ore per fathom. The lode in the 32, going east of the cross-cut, has still a very promising appearance, being full 2 yards wide, and yielding 1¼ ton of ore per fathom. The stopes in the back of the same level, about 60 fathoms east of the cross-cut, continue to yield about 1¼ ton of lead ore per fathom. A new stope has been commenced over the back of the 32, about 90 fathoms east of the cross-cut; the lode is 5 ft. wide, producing 15 cwts. of lead ore per fathom. The lode in the 20, going east of the cross-cut, is 5 ft. wide, containing clay-slate, quartz, blende, and lead ore, yielding of the latter ⅓ ton per fathom. The lode in the stopes over the back of this level, 90 fathoms east of the cross-cut, is 2 yards wide, producing 2 tons of lead ore per fathom. The stopes over the back of the same level, 80 fathoms east of the cross-cut, are producing about 2 tons of lead ore per fm. The 10 is being driven with all speed to come in over those stopes; the lode in the present end is 4 feet wide—poor. The sharp frost has again put a stop to all our surface operations, but we are prepared to sample 60 tons of ore for December month.

COED MAWR POOL.—M. Wasley, Jan. 9: I have previously informed you of the suspension of the principal operations during the past three weeks, in consequence of snow, frost, and dry weather, and which is continuing severe; therefore, I cannot afford much information on those important points—the drivings at the boundary shaft and the sinking at No. 1. However, I am glad to say that the yield, appearance, and prospects continued very good as far as we had worked, and fully confirmed my last report. You are aware we contemplated the necessity of an additional line of rods from the new wheel to the boundary shaft, and that the principal material required besides what is on the mine is timber. The weather, however, has been very unfavourable for all surface work. The air-machine at the boundary shaft will be ready for action as soon as the weather permits the machinery to work. We have six men engaged in the cutting and sinking of Wasley's shaft, which is 7 fms. from surface, and also making the necessary preparations for the bob-stands, connections, &c. When this gets down to an equal depth with the boundary shaft it will considerably assist the drainage of all the mine, and it ought to be sunk as far as the No. 1 machinery permits, which is likely to be a considerable depth below the present deepest workings, as the No. 1 wheel has not had one quarter work since the cutting of the lodes at the boundary shaft. This will also be of great importance to the sinking and extension of the works throughout. We can also add the line of rods from the new wheel, which will be providing for future contingencies. The driving at Hughes's shaft is recently suspended, the water having risen above the level. The ore risen from the shallow places during the past month is but trifling, as being dependent on the tributers working in these places I cannot estimate above 7 tons now broken at the various points. I have this day posted the tracing, by which I hope you may understand the present works and the principal operations throughout. I wish you to observe a piece of ground to the east of the cottage, which continues on to the old Roman works, where some rich ore has been risen in former times, and we have at present a few hands on discoveries on the backs of these lodes, which ought to be noticed, the sett being extensive, and, comparatively speaking, very little explored, while every point operated on has turned out remarkably productive, considering the shallow depth.

CRADDOCK MOOR.—H. and J. Taylor, Jan. 9: Vercoe's Lode: The stopes in back of the 84 are worth 2 tons of ore per fm. The 84 west is unproductive.—Vivian's Lode: The 42 west is worth 2 tons of ore per fathom. The 52 west is worth 1½ ton of ore per fathom. The 62 west is unproductive. The 72 west is worth 3 tons of ore per fathom. The lode in the winze sinking below this level is worth 1½ ton of ore per fathom. The 84 west is unproductive. The lode in the winze sinking below this level is worth 2 tons of ore per fathom. The stopes in the back of the 72 are worth 2 tons of ore per fathom. The stopes in back of the 62 are worth 2 tons, and the stopes in the bottom of the 52 are worth 2½ tons of ore per fathom. We have reached Gerald's lode in the 62 cross-cut north; it is about 2 feet wide, composed of fluor-spar, quartz, mundic, and ore, worth of the latter 1½ ton per fathom. We are continuing the sinking of Harris's shaft, by nine men, the lode has a promising appearance, but does not contain sufficient ore to value.

DALE.—R. Niness, Jan. 10: The Pipe vein is looking better than ever we have seen it before. I consider it worth all of 120*l.* per fm. We put the new lift to work last night, and it answers admirably.

DEVON AND CORNWALL UNITED.—T. Neill, Jan. 8: The lode in the deep adit level still continues worth 3 tons of ore per fm. The lode in the rise in the back of the Midway level is producing 6 tons of ore per fm. The other parts of the mine remain without alteration. At William and Mary, we have put the wheel to work; it answers very well, and the water is in fork about 7 fms. We can see the lode in the western end of the shaft, which appears to be from 4 to 5 ft. wide, producing some good stones of ore, and from its general character, I have no doubt when we reach the 12, and drive under the old workings, we shall open out some good ore ground.

DEVON NEW COPPER.—P. Hawke, Jan. 9: The sinking of the engine-shaft below the 58 is progressing favourably, and we hope to reach the 68 at the time stated in former reports. The composition of the south part of the great north lode, in the said shaft, comprises peach, spar, and prian; the latter contains a small portion of black copper ore, but the quantity of copper is not sufficient to value. The cross-cut into the new south lode, at the 58, is both hard and wet, and the progress in consequence is slow; the product from the lode is principally mundic, with spots of yellow copper ore intermixed. There is no change to notice west at the 58, in the soft part of the great north lode, since last report. The stope in the back of the 25 yields about the same quantity of silver and ore stuff as estimated in previous reports. In the dressing department there are but two hands at present engaged, on account of the snow. The engine, pitwork, and all its appliances work well.

DEVON UNION.—Capt. Donnal, Jan. 10: The water is again in fork to the 28, and the sumpmen will, if things go on favourably, commenced putting in bearers for cistern to-morrow, after which we shall send down the cistern and get on with the dropping of the lift as fast as the nature of the work will admit. We have landed a small pile of work from the 20 this week. In the cross-cut south, in the 15, we have cut a branch about 3 in. wide, composed of mundic, spar, and blende; we anticipate this is getting near the lode, as the ground is becoming more mineralised. There is no alteration to notice in the cross-cut. In the west side of cross-course the machinery works well.

DRAKE WALLS.—T. Gregory, Jan. 10: The branches in the 102, east of Matthew's shaft, are producing saving work for tin, intermixed with copper ore. We have about 6 fathoms further to drive to reach the good vein of tin driven through in the 92. The branches in the 92 east are producing saving work for tin; ground not quite so favourable for driving at present. In the 80 east the branches are becoming larger, and are producing good stones of tin. In the 80, west of Betteley's shaft, we have intersected a large branch, producing good stones of tin, and letting out water freely; we are now sinking a winze below the 70 to communicate with the 80 end, for the purpose of opening out the western stopes below the old workings. The branches in the 70, west of Brenton's shaft, being the extreme western end of the mine, and in the whole ground to surface, will produce tin to the value of 15*l.* per fathom. We have resumed the 60, west of Brenton's, and are cross-cutting south in search of the main branches, which appear to be south of the old driving some little distance only. The north lode when last taken down produced 6*l.* worth of ore per fathom; we are now driving by the side of the lode in order to make greater speed, and also to reach the great cross-course with as little delay as possible.

DULTA.—John Martyn, Jan. 9: We have sold the parcel of tin which I mentioned in my last, and hope to get another parcel from the old burrows in three weeks if the weather permit. We have cut Diana's lode this morning, and are into it 4 ft.; there is no appearance of a footwall. I have carefully sampled the lode, and find it to be worth 3 cwts. of tin per 100 sacks; when this lode is properly laid open it will be set on tribute for 6s. in 1*l.* We expect to cut Butt's lode soon; the ground is very good in the north cross-cut, and there we expect to cut Snell's lode in a few days; this there is no doubt is a good lode. The carpenters have been hindered by the severe weather, but are now at work getting on with the stamps, which will soon be wanted.

DURLO.—B. Champion, B. Martin, R. James, Jan. 9: In Magey's shaft, sinking below the 120, the lode is worth 8*l.* per fm. In the 120 east the lode is worth 6*l.* per fm. In the 120 west the lode is disordered by the cross lode. In the 110 east the lode is worth 5*l.* per fm. In the 110 west the lode is worth 4*l.* per fm. In the 100 east the lode is worth 3*l.* per fm. In the 90 east the lode is poor. In the 68 east the lode is poor. In the 38 east the lode is poor. In the 27 east the lode has been worth 10*l.* per fm., at present passing through the cross lode. Durlo shaft and its neighbourhood is poor. The tribute is without change.

DYFNGWM MINES.—E. Davies, Jan. 8: In consequence of the very severe weather our operations for the month of December have been limited. In 70 east 2 fms. driven; the lode here continues large and orey, and has again opened up productive ground. On north part of lode, driving to meet each other, 1 fm. 3 ft., and 3 fms., making 4¼ fms. This driving has also opened on good orey ground, giving us ample stopings. The latter drivings have made the communications, and the ground will now be stoped in lieu of driving. In backs of the 70 east 7 fms., on account of stoping. The men here worked to the end of the month. The ore holds well, and has improved in eastern end of stope. In back of the 70 west 5 fms., stoped. The fine solid run of ore continues here more or less, an improvement and a backward movement occurring every week, but it turns out stuff that yields well on the floors. The 60 east has been driven 2 fms., further opening up a continuation of the fine lode. It is nearly 8 ft. wide. The lead on north and south part of lode producing from 10 to 25 cwts. per fm. This end has now two excellent stopes opened and ready to work upon as soon as we wish to put on men, which we intend doing as soon as settled weather comes round again. In 60 west we have cross-cut further south 2 fms. 1 ft., and intersected a branch of lode without any particular features. In back of the 50 east 2 fms. 4 ft. 11 in. of orey ground was stoped. A greater quantity of ground was actually broken, but it was to square ground already measured in the month before. This stope was really a magnificent appearance; it is beautiful to the eye to behold, and is a picture worth going some distance to see. The lode is between 7 and 8 feet wide; it contains several large open vughs, and these again lined inside and out with crystals of quartz, and the whole imbedded in and intermingled with perfectly solid lead ore. The latter is so rich, that when we have a drawing of stuff from this stope it is easy to put in the bing between 2 and 3 tons of dressed ore a day. We have a capital stull of ore to draw when the stope is sufficiently high. To accelerate this I intend putting on an extra number of men in the stope. The richest part of the stope is where it joins the whole ground eastward, showing that we shall have as good a stope there as the present one. The 40 east has been driven 2 fms. 2 ft. 5 in. further along the lode; it has gone through some good bunches of ore. The end is not quite so good, but from having a stope under the driving we know what to expect here. The richer ore is yet before us. The stope behind this driving, in back of same level, broke 6 fms. 4 ft. 6 in., and turned out some good bunches of ore. This is in the commencement of the orey ground, and does not include the bunch reported on in the 50; that ore is some 10 fms. farther east. Up to the commencement of the frost the drawing went on well, and brought out some excellent stuff, giving the dressing-floors ample work. The last good dressing-day, about the 10th of the month. In the fortnight previous to that day the dressers put in the bing full 21 tons of dressed ore. There are a few tons in the bing (between 3 and 4) dressed, after shipping 44 tons by the *Conservator*, and nearly 15 tons by the *Gelert*, making 59 shipped. We have also a good supply of stuff and prepared ore in every state, so that when a thaw sets in we shall immediately fall to to put it into the bing. As we have such a large lot of orey ground and broken stuff so high above the water, I see nothing to gain at present with pumping by steam, as our present pumping machinery so soon masters the water. We can pump and draw with steam, but it freezes so excessively hard that it is not possible to pick it out of the rough. I have not let any underground bargains yet for January. I have had all the men taking up, and re-laying the tram-way on adit level. This has been finished, so that we have no one employed to-day. From the good extent of orey ground opened, the quantity of ore broken, and excellent ore we have to work upon, I must say the mine is now in a more satisfactory position than I ever saw it before.

EAST CARN BREA.—T. Glanville, Jan. 9: In the 40 east the middle lode is 2 ft. wide, producing 4 tons of ore per fm., worth at least 10*l.* per ton. In the 40 west the lode is 1 ft. wide, yielding 1 ton of ore per fm. In the 26, driving west of the cross-cut, the middle lode is 15 in. wide, composed of spar and copper ore. In the 26, west of the cross-cut, the south lode is 18 in. wide, yielding 1 ton of ore per fm. In the 26 east the south lode is 2 ft. wide, composed of gossan, intermixed with green carbonate and copper ore. We have still the water in the bottom levels.

EAST GRENVILLE.—G. R. Odgers, Jan. 5: The lode in the shaft is without any change. The lode in the 25 east is again enlarging, now from 16 to 18 in. wide, and from which we are breaking some good work for tin. The heavy floods of late have thrown so much water in that we are compelled to work twelve strokes per minute, with a 11-in. box to keep it. We have suspended the western end for a few days, the lode being very soft, and a great deal of water flowing from it, causes it to be more troublesome for driving, besides hindering the shaftmen, hence we think by stopping this for a few days we shall make more speed with sinking, so as to get down to fix a plunger-lift.

— G. R. Odgers, Jan. 10: We have been hindered from working in the bottom of the shaft this week, in consequence of putting down another lift by the side of the former one which was not sufficient for keeping the water, and we calculate by this additional lift, to be enabled to work regular. The two boxes will equal one of 13 ft. 5 in. diameter.

EAST GUNNIS LAKE AND SOUTH BEDFORD.—J. Phillips, Jan. 10: We are still driving by the side of the lode in the 36, east of engine-shaft; we intend to take down the lode again the early part of next week. The lode in No. 2 winze is from 10 to 12 ft. wide, and worth 8 tons per fm. The stopes in the bottom of this level are worth 6 tons. The stopes in the back are worth 2 tons. The cross-cut south is without alteration. In the 24 east we are still driving by the side of the lode. Gard's shaft is sinking in favourable ground under the shallow adit; we have not taken down the lode for the last 4 or 5 fms., but have strings of very rich coated and black ore in the country.

EAST PROVIDENCE:—W. Hollow, T. Uren, Jan. 8: The following tutwork bargains were set on Friday last. A cross-cut to drive south from Harvey's shaft at the

35 by six men at 12*l.* per fathom. A winze to sink in bottom of Wheal Mount adit, east of Chapple shaft, on new south lode, by six men at 6*l.* per fathom. We shall give the character and value of the lode here in our next report, as we only commenced sinking yesterday; the lode in the adit end east is still producing rich stones of tin; but as there is not sufficient air to drive and sink both at one time, we have suspended the end for the present, and put the men to sink the winze mentioned above. The adit level to drive west from Chapple shaft, on new south lode, by two men and two boys at 3*l.* 10*s.* per fathom; lode 6 in. wide, yielding occasionally stones of tin. We shall commence to sink a new shaft on this lode as soon as we have found the back of it in the costeaning pit at the surface.

EAST TREFUSIS.—J. Pope, Jan. 10: At Smith's engine-shaft we are down the required depth for a 58, and have commenced to drive a cross-cut north to intersect Trelawny's lode, which we hope to do in 3 or 4 fms. driving. In the 34, east of cross-cut, on Trelawny's lode, the lode is 20 in. wide, producing stones of copper ore. In the 22, west of the cross-course, on Smith's lode, the lode is 12 in. wide, chiefly quartz. In the 22, east of the cross-course, on the south lode, the lode is nearly 2 ft. wide, spotted with ore. In Trelawny's flat-rod shaft, sinking below the 30 (from surface), the lode is 3 feet wide, yielding good stones of copper ore, and looks kindly to further improve shortly.

EAST WHEAL RUSSELL.—J. Goldsworthy, Jan. 9: At Homersham's shaft, the lode in the 110 east is 3 ft. wide, composed of quartz, prian, mundic, &c., producing good stones of yellow copper ore. In the 100, west of Oats's winze, the lode is 3 feet wide, composed of iron, capel, quartz, &c.—improved for ore, producing full 1 ton per fathom, with a kindly appearance. The lode in the 110 east is 5 to 6 feet wide, composed of peach, prian, quartz, mundic, and black copper ore, producing 1 ton of ore per fathom; there is a splice of elvan in the lode, similar to that in the 88 before the green carbonate and red and black oxide were met with; we are daily looking forward to a great improvement in this lode. In Oats's new winze, in the bottom of the 88, the part of the lode carried is worth from 80*l.* to 90*l.* per fm. The stope in the back of the 88, on the north part of the lode, is worth 30*l.* per fathom. The stope in the back of the 88, east of Soper's rise, is worth 25*l.* per fm. The 66 east is now clear of the cross-course; the lode is showing a kindly appearance, composed of white prian, quartz, and mundic, and spotted with copper ore.

EAST WHEAL TOLGUS.—Jan. 9: The lode in John's shaft, sinking below the 57, is 10 in. wide, consisting of peach, spar, and occasional stones of ore. In the 57 east the lode is 18 in. wide, consisting of mundic, spar, and good stones of ore, a very promising lode. In the 46 east the lode appears to be split, and we are now stripping down a piece of south branch, which appears to be more in the regular run of the lodes; it is small and poor. The lode in the 34 east is 16 in. wide, and consists of mundic, peach, and spar, with stones of ore, but not of much value. The lode in the 22 east is 18 in. wide, producing saving work for tin, but not rich. The stope in the back of the 34, west of John's shaft, is worth for tin and copper 11*l.* per fm. The stope in the back of the 22, east of John's shaft, is worth for tin 12*l.* per fathom; the stope in the bottom of the 22, east of John's shaft, is worth for tin 10*l.* per fathom. The ground in the 46, north from John's shaft, is easy, and a good-looking killas. On the north lode, in the adit end east, the lode is small and poor.

FURSDON.—J. Hampton, J. P. Daw, Dec. 29: Ellen's shaft, which is down to the 21, is improved in the last foot or two sinking, and in the western end there is a leader of ore 3 in. wide, besides the ore disseminated throughout the shaft. The summpen are in a forward state in dividing and casing the shaft from the 11 to the 21, to enable us to draw with the machine from the bottom level. We have to-day set the 11 west, on Margaret's lode, to four men, at 4*l.* per fm., the end at present is poor and disordered, owing to the slide. We have taken two men from the 11 west, and put them to drive east of shaft, on Ellen's lode, at 2*l.* 15*s.* per fm., which we contemplated doing for some time past, as soon as the shaft was down. The stopes at the back of the 11, on Ellen's lode, are worth about 20*l.* per fm.; as soon as the 11 west is advanced a little, we intend to stope the back behind the end, particulars of which you have been previously advised. Owing to the severe weather our dressing operations are entirely suspended. We have 29 tons 4 cwts. 2 qrs. of copper ore ready for the market.

— J. P. Daw, Jan. 9: The 21 fm. level is down west of Ellen shaft 7 ft., which has produced a little ore, but not to value. The 11 west, on Margaret lode, is poor, but kindly. The 11 east, on Ellen lode, is kindly, producing stones of ore, but not to value. The stope in back of the 11, on Ellen lode, is worth about 18*l.* per fm. The frost and snow have greatly impeded our dressing operations.

GAWTON.—G. Rowe, Jan. 5: The rise in the back of the 50 is communicated with the 36, which has thoroughly ventilated the mine. We are now in a good position to cross-cut through and take down the lode to prove its value in different places, which will be done with all possible dispatch. The lode in the 36 west is at the present point small. The tribute department continues to be without any material alteration.

GERNICK.—C. Carkeek, Jan. 9: Spencer's engine-shaft is sunk 8 ft. below the 20, sinking by six men, at 12*l.* 10*s.* per fm.; the lode in the same is 4 ft. wide, composed principally of quartz and mundic, and presents strong indications of quickly becoming valuable for copper ore, as we have occasionally some good black oxide and green carbonate of copper from it. In cutting the plat at the 20 we have cut into the south part of the lode 2 ft., which is principally schorl. We have not yet cut through it; as soon as this is done we shall have samples assayed from the same, when I will inform you of its size and value for tin. We shall be in full order of driving the 20 fm. level east and west on the lode next week. Our water has considerably increased, but the machinery is in good working order.

GONAMENA.—R. Pascoe, Wm. George, jun., Jan. 9: In driving the 90 cross-cut north, towards the eastern heave of the lode, fair progress is being made; this level has been driven west about 6 fms. throughout, in which have had a good tinny lode. The lode in the 80 is at present small. The tin stope in back of this level is still worth 25*l.* per fm. No. 2 stope is worth 1 ton of copper ore per fathom. The lode in the 70 east is looking better than we have seen it for some time past, and is now opening up a profitable piece of tin ground. The winze from the 58 is holed to this level, by which it is well ventilated. The men are now employed in stoping west from the winze, where the lode is worth 15*l.* per fm. for tin and copper. The severe weather of late has entirely suspended our buildings, as nothing has been done towards the burning-house for three weeks. We sold at St. Austell, on Dec. 28, 35 cwts. 1 qr. 16 lbs. of tin, at 80*l.* per ton, realising 141*l.* 11*s.* 5*d.*

GRAMBLER AND ST. AUBYN.—J. Mitchell, Jan. 10: Williams's shaft is sunk to the 56, and extended 3 fms. east and 3 fms. west, in a lode from 9 to 12 in. wide, producing good stones of ore. The 46 west, on the same lode, is 1 ft. wide, but at present poor. The 46 east has just intersected a cross-course; lode looking kindly, with stones of ore; we expect an improvement. In driving the 36 south 20 fms. we have intersected Simmons's lode, 2 ft. wide, of a very kindly appearance. We cannot speak of its value till we open a little ground on it. All the other ends are much the same as reported at the last account meeting. Our progress in the bottom levels has been impeded by the great increase of water, in consequence of the snow and heavy rain of late.

GOGINAN.—January 9: The lode in the 100, east of Gilbertson's shaft, is 3 ft. wide, yielding 10 cwts. of lead ore per fm., and is progressing favourably. The lode in the 12, below the 60 or deep adit level, on the north lode, going east of the winze 15 fms. west of Gilbertson's shafs, is 5 feet wide, yielding 12 cwts. of ore per fathom; the same level going west of winze is yielding 8 cwts. of ore per fm. The lode in the rise over the 60, 16 fms. west of Gilbertson's shaft, on the north lode, is 4 ft. wide, producing 8 cwts. of ore per fm., and looking promising; ground hard for exploring. We are pushing on with the sinking of the Bryn-pica shaft, below the 60, as fast as possible by six men. The tribute pitches in the different levels throughout the mine are without any alteration to notice since my last report. The dressing is nearly all at a standstill, in consequence of the very severe frost.

GREAT RETALLACK.—W. H. Reynolds, Jan. 5: Stephens's shaft is now as deep as the 40 fm. level, east of the engine-shaft, and we have set the men to cut through the lode, and drive west to hole to the level above referred to. Our tribute pitches are still looking well, and set at a reduced tribute—three pitches at 6*s.*, one at 7*s.* 6*d.*, and one at 15*s.* per ton of blende.

GREAT SOUTH TOLGUS.—John Daw, Jan. 9: There is no alteration in any of the levels since last reported. The stopes and pitches are looking well.

GREAT TREGUNE CONSOLS.—J. Spargo, Jan. 10: The lode in the 80, west of Hobler's shaft, is still looking well, and is producing some saving work, just as last reported on. We are still intersecting some beautiful branches of soft spar, spotted with copper; these branches are dipping towards the lode, and at the intersection I have not the least doubt we shall meet with a good course of ore.

GREAT TYWARNHAILE.—John Edwards, Timothy Hampton, Jan. 7: The 40 end, east of James's shaft, is still improving, now worth 30*l.* per fm. for copper ore. The stopes in back of the 50, east of James's, will turn out 8 tons of copper ore per fathom. The lode in the winze sinking below the 50 is large and orey. In the 50 end, west of ditto, is just as last reported. We expect to reach Taylor's lode in the 50 cross-cut next week. We shall not be able to sample any ore from the 60 this time, in consequence of the water being in this level, owing to the very heavy rains. The tribute pitches are looking just as usual. The crusher with all machinery is looking well. We shall sample to-morrow about 170 tons of copper ore, and should have more had not the weather been so very rough for dressing.

GREAT WHEAL ALFRED.—W. Bugelhole, J. Delbridge, Jan. 9: The lode in Copper House shaft is much the same in appearance as last week. The lode in the 220 east is 4 ft. wide, and is now worth 16*l.* per fm. The north part of the lode in the 220 west is improved, and is now worth 12*l.* per fm., and good indications of further improvement. The lode in the 210 west is 6 ft. wide, worth 45*l.* per fm. The stope, east of the rise, in back of this level, is worth 56*l.* per fm. We have finished stripping down the south part of the lode, 16 fms. behind the end, and put the men to stope the back immediately over; the lode is worth 27*l.* per fm. The lode in the winze east of shaft, at this level, is worth 11*l.* per fm. We have suspended driving the 200 west for the present, and put the men to strip down the north part of the lode 16 fms. behind the end, where the lode is worth 10*l.* per fm. The lode in the winze sinking below this level is improved, and is worth 10*l.* per fm. The lode in the 190, east of Painter's shaft, west of cross-cut, is worth 5*l.* per fm. There is no change in the 170, 160, or 148 cross-cuts during the past week. The lode in No. 1 stope, in bottom of the 137, is worth 18*l.* per fm. The lode in No. 2 stope is worth 16*l.* per fm. No. 3 stope is worth 11*l.* per fm.

GREAT WHEAL MARTHA.—H. Rickard, Jan. 9: The lode in the 40 east is not ye cut through, but the orey part of the lode is about 5 ft. wide; the rest spotted with ore a fine lode indeed.

GREAT WHEAL VOR.—T. Gill, Jan. 8: The Metal engine-shaft men are engaged in cutting a drop plat and preparing the shaft, for the purpose of fixing a lift at the 142; when this work is completed we shall resume the sinking of the shaft with all speed. In the 142, driving east of Metal engine-shaft, the lode is 1½ ft. wide, and worth about 40*l.* per fm. In the 142, driving west of Metal engine-shaft, we have not intersected the lode, but expect to do so in the course of a few days; the ground is very hard and wet, yielding a little tinstuff, but not sufficient to value. In the 132, driving east of Metal engine-shaft, the lode is 2 ft. wide, and worth 150*l.* per fm. In the 132, driving west of Metal engine-shaft, the lode is 3½ ft. wide, and worth about 50*l.* per fm. In the 100, driving west of Metal engine-shaft, the lode is 2 ft. wide, yielding a little tin, and looks promising to improve. The stopes in back of the 132, east of Metal engine-shaft, are worth about 60*l.* per fm. The stopes in back of the 132, west of Metal engine-shaft, are worth about 25*l.* per fm. In the rise in the 90, west of Metal engine-shaft, for the purpose of communicating with Ivey's shaft, the lode is 2 ft. wide, but poor for mineral. We are making good progress in enlarging Ivey's shaft; we hope to get it down near the 70 this month.

HAWKMOOR.—J. Richards, J. Richards, Jan. 8: There has been no lode taken down in either of the bargains, expect in the stopes in the back of the 50 east, where the lode is worth full 2 tons of copper ore per fm. At West Hawkmoor there is no alteration. We sampled yesterday at Calstock, [a parcel of copper ore computed 58 tons, of fair average quality.

HINGSTON DOWN CONSOLS.—T. Richards, Jan. 9: Morris's engine-shaft, sinking below the 120, is producing saving work. The 120 west is producing some rich stones of ore. There is no change in the 110 cross-cut. The 100 west will produce about 3 tons of ore per fm. The winze in the bottom of the 100 will produce 2 tons of ore per fm., and is for the present suspended, in consequence of water. The stopes in the bottom of the 100 will produce 7 tons of ore per fm. The stopes in the back of the 100, 8 tons per fm. The 85 west, 5 tons per fm. The rise in the back of the 85 is worth about 50*l.* per fm. Nothing new in any other part of the mine.

HOLMBUSH.—R. Pryor, Jan. 4: I consider, on the whole, our prospects are improving on the flap-jack lode. The stopes in the bottom of the 40 will produce 10 tons per fm. The winze is down 6 fms. below this level. The 40 will produce for 6 ft. long 7 tons per fathom. The 50 end will produce full 6 tons per fm. The whole of these bargains are worth full 7*l.* per fm.

HUCKWORTHY BRIDGE.—J. H. Rodda, Jan. 9: The lode in the 25 end west has a very promising appearance, with good stones of ore in it. The lode in the 15 end west will produce 1 ton of ore per fathom. No alteration has taken place in the winze this week.

KELLY BRAY.—S. James, Jan. 5: The lode in the 115 west is improved, now worth 18*l.* per fm. The pitches in back of the 85 east are worth about 12*l.* to 14*l.* per fathom. The lode in the winze in the 75 east is somewhat fallen off in value in the past week, but we hope it will be of short duration, for this reason—the lode in the pitch in back of the 85 is still 4 ft. wide, and yielding 3 tons of ore per fm., worth 4*l.* 10*s.* per ton. The lode in the 45 east is 2 ft. wide—poor. The lode in the 25 east is 1½ ft. wide, looking kindly, and the ground is easy for exploring; the stratum is light-blue killas, such as that in which copper ore is generally found in this mine. The pitches to the west of shaft have not yielded so much ore as we anticipated, owing to a small cross-course which split off from the large one, and disordered the lode in back of the 56 west.—Eastern Mine: The ground in the 70 cross-cut is somewhat eased. The whim-shaft will be communicated to the 70 by the end of the ensuing week if all is well, after which the operations at the above-named point will be very much facilitated. The lode in the 60 east is 2½ ft. wide, yielding occasionally stones of rich copper ore—a healthy looking lode.

KESWICK.—J. Postlethwaite, Jan. 5: In the 20 north drift the lode is worth 20 cwts. of lead ore per fm. Charles's drift is worth 14 cwts. per fathom. Lancaster's stope is worth 5 cwts. per fm. In the 30 Charles's stope is worth 10 cwts. of lead ore per fm. Hutchinson's rise is worth 5 cwts. per fm. Greenwood's drift is worth 12 cwts. per fm. In the 40 north drift, west vein, the lode is worth 10 cwts. of lead ore per fm. Holliday's stope is worth 8 cwts. per fm. Spark's stope is worth 10 cwts. per fm. In the 50 north drift, east vein, the lode is worth 10 cwts. of lead ore per fm. Hodgson's stope is worth 8 cwts. per fm.

LADY BERTHA.—Capts. Harpur and Metherell, Jan. 7: The different ends and stopes present much the same appearance as when last reported. The 41, west of shaft, is worth 4 tons of ore, or 20*l.* per fm. In the 41 east we have not cut into the lode lately. In the 30 east we are still driving by side of the lode. In the stopes in bottom of this level the lode continues to produce 6 tons of ore, worth 30*l.* per fm. The lode in the 20 east is large, spotted with ore, but not to value. The stopes in the bottom of this level are without alteration, worth 4 tons of ore, or 20*l.* per fm. No change to notice in the tribute department since our last. We sample this day three parcels of ore, computed 200 tons.

— J. Metherell, Jan. 10: There is no alteration in the 53 east. In the same level west we have shot into the lode, and broken some large stones of mundic and good spots of ore. The lode in the 41 west is a little improved, now worth about 24*l.* per fathom. Nothing new in the same level east. The lode in the 30 east is very promising, producing good stones of ore. I have no doubt there will be a change here shortly. All other places are as reported on Monday last.

LLANFAIR.—Jan. 7: We are completely frozen up; the water is within 2 fms. of the 70. The 60, driving east, is looking more promising than it has been; the lode is 12 in. wide, containing quartz and a little lead ore, and water issuing through the lode. In the 50 east there is still a pretty good lode; in this end it is worth at present 8 cwts. of ore per fm.; we have had a little ore in this level, 24 fms. long, but it does not appear to make up more than 2 or 3 fms. above the back of the level in the western end of the stope; but we expect the ore will gain up as we stope eastward. In the 40 the ground is more composed, and the lode appears to be more regular, producing good stones of ore. In the 20 west, on the north part of the lode, the lode is not looking so well as it has been, now worth 4 cwts. of lead ore per fm. In the 50 west we have had a soft bed of ground in this end, which has completely cut off the lode for the time; we have still a very good footwall, and I expect the lode will shortly appear again; the lode we have had in this end for the last 10 fms. has been highly impregnated with copper ore. We are putting our crusher together as fast as possible, which is all on the mine. We are also laying a rail in the 50 east, and fixing a crab-winch at the 70 to change the bottom buckets, or do any work in the lower part of the mine; we are prevented from driving our bottom levels. The lode in the 80 when we left it was worth 12 cwts. of lead ore per fm. The men that were working in this level are now sinking a winze under the 20 west, on the junction of the north and south lodes.

MAUDLIN.—Wm. Tregay, Jan. 5: In the 50 cross-cut south the ground is rather more favourable for driving. Nothing cut of any importance. A cross-cut has been set to drive north to intersect some branches which appear to be gone off in that direction. In the 38 east the ground is harder for driving than it has been, with still plenty of gossan, and some flookan.—West Mine: The men are driving west on the lode intersected last week, which produces spots of yellow copper ore. The Duchy agent inspected this mine on Monday, and expressed his approval of our proceedings.

MOLD.—Capt. Rickard, Jan. 9: The lode in the rise is further improved, worth from 2 to 2½ tons to a fathom. At present the lode in the stope is small, but it will soon open out wider, and then I expect an improvement also in that part.

MOLLAND.—T. Bennetts, Jan. 9: In the engine-shaft, sinking below the 52, a part of the lode has come in the shaft, producing good stones of ore occasionally, and good strings of ore are seen, too, in the country, which I conclude is not a bad indication. The lode in the 42 east is large, and looks promising for producing ore; the stopes in the back of this are producing 1 ton of ore per fm., but the ore being thinly sown throughout the lode it is not of very high quality. The lode in the 32 east, and in the stopes in back of the level, are looking much the same as last week. The weather is still very much against us for dressing ore.

NANTEOS AND PENRHIW.—H. Boundy, W. Paull, Jan. 8: Onr pay and setting took place on Saturday last. The following are the particulars:—Eystumtean: Two stopes in the back of the adit level, and east of No. 3 rise, is let to twelve men, at 3*l.* per fathom; the lode on an average yields 15 cwts. of ore per fm. The level to drive west of No. 2 rise by four men, at 5*l.* per fm.; the lode contains mundic, blende, and a little ore. Recce's level to drive east by four men, at 4*l.* 10*s.* per fm.; the lode is disordered by a cross measure of ground. Rowe's level to drive west of No. 1 rise, by four men, at 7*l.* per fm.; the lode is 6 ft. wide, composed of mundic, blende, and ore, valued at 7 cwts. per fm. A level to drive and stope in ditto, on the south part of the lode, and west of No. 3 rise, by four men, at 6*l.* 10*s.* for driving, and 2*l.* 10*s.* per fathom for stoping; the lode yields 10 cwts. of ore per fm. The stopes east of No. 3 rise, in back thereof, by six men, at 2*l.* 10*s.* per fm.; the lode yields 12 cwts. of ore per fm.—Bwlchgwyn: The 30 to drive east by four men, at 4*l.* per fm.; the lode contains a little ore, but not to value. No setting with the tributors, as they take for two months. The very severe frost and snow which we have had for the last three weeks have completely shut up all our surface and dressing operations.

NETHER HEARTH.—W. Vipond, Jan. 2: Since the meeting in October we have walled Robinson's engine-shaft, and sank 5 fms. 3 ft. from surface, finished the adit, and cut out and built in bob pits, and made all ready for putting in pumps, &c. For the last three weeks the men have been working on the Dun vein; two are driving the end, at 32*s.* per fathom. We have more limestone putting on here, and I have no doubt but in a short time we shall have it all right; six men are stoping the limestone below the level, at 45*s.* per fathom. The limestone sets down about 6 ft. below the bottom of the level, and is yielding ore to profit at present. In the western stope the ore is flatting off on both sides; eastward the ore is laying more perpendicular in the vein, and I expect as we get further on, and the limestone all in its proper place, we shall have a good mine in the level; one man and two boys are driving north from this level, at 35*s.* per fm. By cross-cutting this ground we expect to intersect another vein, unworked, to the north of our present operations. The stock of bowse we have worked at present will yield about 10 bings of ore. The cost for December at the mine will be about 50*l.*

NEW WHEAL FRANCES.—C. Carkeek, Jan. 2: We have commenced sinking Dunsford's engine-shaft below the deep adit, now down 3 ft. below the level; lode in the same 1 ft. wide, worth at least 50*l.* per fm. for the length of the shaft (12 ft.) We have also six men employed cutting down this shaft from surface to adit. The winze sinking below the deep adit is now down 8 fms.; the lode in the same 15 in. wide, worth about 15*l.* per fm. The ground in this winze is becoming more decomposed as we sink, and the lode increasing in size; this we consider a very encouraging feature in the mine. In the adit end west the lode is improving, now about 7 in. wide; lode producing good stones of tin, and very kindly in appearance. In the cross-cut south from east shaft we have cut an unusually large stream of water, which has greatly impeded our progress in driving. We have about 2½ fms. more to drive to cut the lode. This cross-cut has been suspended for the last fortnight, the men having been engaged securing some breakages in the old adit level caused by the late heavy rains. This we expect to complete by the end of the present week, when the men will again resume driving the cross-cut. We have contracted for the building of the engine-house, boiler-house, &c., and are now busily engaged clearing foundation for the same.

— C. Carkeek, Jan. 5: I beg to inform you that the sump-shaft sinking below adit is worth 50*l.* per fm., and the winze (now down 8 fms. below adit) is worth 15*l.* per fm. The adit end is looking better again, now producing some rich work for tin. We have set the engine-house &c., to build, and everything complete for 260*l.*

NORTH BASSET.—T. Glanville, G. Davey, Jan. 9: In the 142, east of the flat-rod shaft, the lode is 3 feet wide, producing stones of copper and tin ores, and letting out a large stream of water. In the 102, west of Lyle's shaft, the lode is 4½ ft. wide, chiefly composed of spar, with occasional stones of copper ore. In the 92, west of Grace's shaft, the lode is 2½ ft. wide, composed of spar, peach, and yellow copper ore, yielding 1 ton of the latter per fm. Our sale of tin ores, on Monday last, realised 118*l.* 13*s.* 9*d.*

NORTH BULLER.—J. B. Delbridge, Jan. 5: We have not been doing much in the bottom part of the mine during the week; our water is very quick. We have 5 fms. of water in now, and our engine working from 11 to 12 strokes per minute. If all things go well, we shall be in fork on Monday next. In the 78 west the lode is small: ground favourable for driving. In the 68 west the lode is 2 ft. wide, yielding stones of copper and tin, not much to value. At King's shaft we have not sunk much in the past week with the water; the ground is favourable for sinking in the shaft. The engine, rods, and pit-work are working well.

NORTH DOLCOATH.—Joseph Vivian, Jan. 5: Our engine-shaft having now been sunk to the 20 fm. level, I intend to pursue a scale of working which will reduce the expenditure at present to about 110*l.* per month. With this view we shall confine ourselves principally to pushing down the engine-shaft with as much dispatch as possible; and exploring at a greater depth than we have yet reached, for I am of opinion that the adit and the 10 fm. levels are too near the surface to be likely to lead to any very valuable discoveries of copper ore; and it is to the copper we look for permanent dividends, it being my decided opinion that under the fine mass of gossan passed through at the shallow and deep adits, in one part of which we were fortunate enough to discover the rich formation of chloride of silver, large deposits of copper exist. It seems to me, therefore, that the true policy for developing the resources as quickly and economically as possible will be to make it our principal object for the present to sink the engine-shaft. I have, therefore, suspended the driving of the 10 fm. level, both east and west, and shall only drive the 20 fm. level east, in which direction we shall be getting into deeper ground, come in contact with a cross lode of a very favourable character, which has produced some silver at the deep adit level, and reach a point where the main lode in the 10 fm. level has been large, and of a very promising nature for making copper in depth. Preparatory to sinking the engine-shaft below the 20 fm. level, we shall have to cut a plat, sink a fork, and fix a plunger-lift; the shaft being perpendicular to that point, under which it will be sunk on the course of the lode, which has a north underlie of about 2 ft. in a fathom. In consequence of the shaft being on the lode, our sinking will now be more rapid and economical than it has been. I intend to continue the driving of the deep adit north, as there are chances that we may discover on some of the lodes, which are yet unexplored in that part of our sett, formations of silver similar to that which we discovered on the main or engine lode. We are also likely to meet with valuable copper lodes to the north of our present workings below the adit level. We shall continue the driving of the 10 fm. level north on the cross lode, in order to see what the result will be of its passing from the elvan, in which it is at present into the killas lying on the elvan. By this scale of working, and by curtailing some few surface charges, the labour cost will, I think, be reduced to about 80*l.*, and the merchant's bills to about 30*l.* per month. The great floods which we have had caused our adit to break in, and the consequence was that our mine in common with several others affected by the same accident, was filled with water. I have now the pleasure of informing you, that the adit has been again cleared, and that without any further let, which there is no reason to apprehend, our mine will be drained to the bottom on Monday next.

NORTH LAXEY.—R. Rowe, Jan. 3: Owing to the severe frost and snow the water has been in, and, therefore, very little done in the 38 fm. level for the last fortnight. We are nearly ready to start the new shaft on the course of the lode below the 27 fm. level; only hindered now by the stuff in the level, and the difficulty caused by the frost in working the wheel. I am glad to say we have at this moment a good lode in the 27 end driving south; it is about 3 ft. wide, and worth 1 ton of lead to the fathom, and best in the bottom.

NORTH TRESKERBY.—J. Vivian, Jan. 9: In the 57, driving east of engine-shaft, the lode is 7 ft. wide, worth 40*l.* per fm. for copper. At Carbis's winze and Highbnrrow shaft, east of this end, and sinking under the 47, where we have been enabled to sink nearly as deep as the level below, the water being entirely drained off from these bargains, which are the same as last reported, being sunk through a good course of ore all the way from the 47, down 8 fms. each. In the 57 west the lode is 3 ft. wide, promising, with stones of ore, not to value. The stope in the back of 20, at Tresidder's shaft, is looking well. Nothing new to notice in any other parts of the mine.

NORTH WHEAL ROBERT.—James Richards, Jan. 10: Scoble's cross-cut at the 52 west is suspended for the present, and the men are removed to rise in the back of the 30 west on the middle part of the lode. In the 52 west, east of Jenkin's cross-cut, on No. 1 south lode, the lode is unproductive. In the 42, east of Gorman's cross-cut, on No. 1 south lode, the lode is 2 ft. wide, composed of capel, mundic, quartz, and good stones of ore, and is promising. In Edward's cross-cut, at the 30 west, the ground is rather hard and progress slow. In Weymouth's rise, in the back of the 30, on No. 1 south lode, the lode is worth ¼ ton of ore per fathom. The indications are good and warrant an improvement. In Crowie's winze, sinking below the 30, on No. 1 south lode, the lode is worth 25*l.* per fathom. The trial shaft is in regular course of sinking below the 62, in favourable ground for progress.—Trial Shaft: In the 42 west, on No. 2 south lode, the lode is from 2 to 3 ft. wide and unproductive. In the 42 east, on No. 2 south lode, the lode is 18 in. wide and yields good stones of ore.

NORTH WREY.—T. Kemp, Jan. 10: The 38 is set to drive north by six men, 4 fms., or the month out, at 70*s.* per fm.; the lode is 2 ft. wide, composed of very strong mundic, white prian, soft fluor-spar, and good stones of lead ore. I fully expected the 20 would have been cleared by this time, but in consequence of one of the sets of old timber breaking away a large quantity of stuff run down into the level; we shall, however, have it all cleared and secured by the end of the week.

OKEL TOR.—W. B. Collom, Jan. 10: In the 80 east no lode has been taken down for the week; at the last taking down it was 3 feet wide, yielding 6 tons of ore per fm. In the 65 east the lode will yield about 2 tons of ore per fm., and the lode improving. No lode has yet been taken down in the winze sinking under the 65. The lode here will be cut into in the course of a few days, when we expect to find it productive. In the stopes in bottom of the 50, west of Ennor's winze, we are getting down to the point where the lode in the winze made so large. The lode in the stopes to the east of winze is looking very well, as is the lode in the back of the 50. In consequence of the weather we have been unable to sample the quantity of ore intended, although we have it broken. The lode in the eastern winze, in bottom of the 50, will yield 5 tons of ore per fm.

PAR CONSOLS.—A. Stephens, F. Puckey, T. Rich, J. Hosking, Jan. 7: Eastern or Copper Part of the Mine, Stephen's Lode: In the 200, east of the underlie-shaft, the lode is small and poor. In the 180 west the lode is 1 foot wide; of a very promising character, and letting out a great deal of water. We expect this end will improve very soon, as we are approaching a good run of orey ground that is gone down in the levels above. In the 165 west the lode is 3½ feet wide; worth 20*l.* per fm. In the 150 west the lode is 4 ft. wide; worth 16*l.* per fm. In the 135 west the lode is 3 ft. wide; worth 10*l.* per fm. In the same level east the lode is 3 feet wide; worth 15*l.* per fm. In the 120 west the lode is 3 ft. wide; worth 18*l.* per fm. In the 110 west the lode is 3½ ft. wide; worth 25*l.* per fm. In the 89 we are driving north to cut the lode west of the cross-course.—Western, or Tin Part, Puckey's Lode: In the 125, west of Puckey's north shaft, we are driving by the side of the lode, in consequence of the lode being hard and expensive for driving. We wish to drive this end as fast as possible to cut the cross-course, which is not far ahead, in order to let down the water from the level above, so as to enable us to sink a winze below the 110 for ventilation. In the 110 west the lode is 2 ft. wide; worth 10*l.* per fm. In the 100 west the lode is 2 ft. wide, but still poor. In the 90 west the lode is 5 ft. wide; worth 10*l.* per fm. The lode in the winze sinking below the 80 west is 4 ft. wide; producing saving work for tin. In the 70 west the lode is 3 feet wide; worth 15*l.* per fathom. In the 60 fm. level east the lode is 2 feet wide; worth 7*l.* per fathom. The lode in the winze sinking below this level is 2 feet wide; producing saving work.—Puckey's South Lode: In the 135, west of Puckey's south shaft, the lode is 3 ft. wide; worth 15*l.* per fm. In the 110 east the lode is 5 ft. wide; worth 25*l.* per fathom. In the 90 east the lode is 4 feet wide; producing saving work for both tin and copper The other bargains not named are much the same as last reported. On the 20th ult. we put our new 70-in. engine (Jeffrey's) to work, which is working to our satisfaction.

PELYN WOOD.—J. Richards, Jan. 10: The lode in the 10 south is a very fine looking one indeed, and holds out great promise of success. Other parts of the mine as last reported. In my next you shall have particulars of our setting, &c.

PENDEEN CONSOLS.—W. Eddy, J. Warren, Jan. 5: In the 118 north no lode taken down. In the 118 south the lode is yielding 4 tons of ore per fm. In the 106 south the lode is still poor, but kindly for improvement. In the 106 fm. level north the lode has made a splice, and the orey portion changed over to the western side instead of the eastern. The stopes in back of this level are producing just the same quantity of ore as they have for some time past, and still worth their former value. Mr. Paull has begun the survey of the mine.

PERRAN IRON AND LEAD.—J. Webb, Jan. 2: Since my last report we have finished filling the platform for the quay at the shipping port, and covered it with 3-in. stuff for flooring. The platform for taking down the great iron lode in the cliff is also finished. The unbearing of the lode has been more expensive than we anticipated, in consequence of a cross run of spar having fallen in with the lode, and causing the iron to be of a very mixed character; however, we have taken off a great deal of this spar, and can now take down many hundreds of tons of iron, but being in such an open exposed place in the eye of the north wind, it will be wise to let it abide over the winter months. In driving the bottom (sea) level we came into a change of ground, when the iron disappeared, and black jack, mundic, and silver-lead came in the lode; we drove after this change about 7 fms., and then commenced to sink a few feet; this sink is now down about 18 ft., it continues to yield black jack and good stones of lead. I had an assay made of the lead, which produced 15 in 20 for lead, and 55 ozs. of silver per ton. I had also an assay of the mundic, which produced 32 ozs. per ton for silver; the ground and flookan about the lode appears quite congenial for making great deposits of lead in depth. By extending on this large and what had been called on the outcrop an iron lode, various intersections with other productive lead lodes will be met with, also a large elvan course which has seldom failed in this locality of enriching the lead lodes when coming in contact with the same. The mines to the south, on the same large iron lode (on top), are now raising to profits many hundreds of tons of black jack per month, and probably the top of large deposits of lead. I recommend that we provide a pumping-engine, and sink to some good depth, and extend liberally on this lode.

PROVIDENCE.—W. Hollow, P. Rogers, T. Anthony, Jan. 8: Higgs's Shaft: No. 3 carbona is worth 35*l.* per fm. No. 4 carbona is worth 30*l.* per fm. The lode in the stope in bottom of the 75 is worth 20*l.* per fm.—New South Lode: The lode in the 65 east is worth 20*l.* per fm. No. 1 stope in bottom of this level is worth 50*l.* per fm. No. 2 stope is worth 90*l.* per fm. No. 3 stope is worth 30*l.* per fm. There is no change in any other part of the mine.

REDMOOR.—T. Taylor, Jan. 8: We have been desuing the lode in the 80 west, 70 west, and 40 east during the past week. There is no alteration worthy of notice in any of the stopes. The heavy snow and cold are making against our surface work.

ROSEWALL HILL AND RANSOM UNITED.—E. Thomas, Jan. 9: In the 50 end, east of the Ransom engine-shaft, the lode is small, worth 4*l.* per fm. The 60, east of the some shaft, is worth 6*l.* per fm. The 70 east is much the same in value as when last reported, worth 14*l.* per fm. The lode in the 100 end, west of the said shaft, is large, and worth from 15*l.* to 18*l.* per fm., a promising lode. We are pushing on with all possible speed in getting down our new skip-road in the Ransom shaft.

ROSEWARNE AND HERLAND.—H. Stephens, Jan. 9: In consequence of the late heavy rains, we have been able to do but little in the 30 since my last. The ores sotd on Friday realised as follows:—No. 1, computed, 6 cwts., 466*l.* 7*s.* 6*d.*; No. 2, 20 cwts., 177*l.* 6*s.* 6*d.*; No. 3, 19 cwts., 77*l.* 10*s.*; No. 4, 21 cwts., 27*l.* 8*s.* The 30 east is looking better for copper. All the other parts are much as they have been for some time past

SIGFORD CONSOLS.—W. Hosking, Jan. 8: The sinking of the engine-shaft is proceeding most satisfactorily; the ground continues easy, and we shall not be long in reaching our next level. The cross-cut adit, to intersect the north copper lode, is driven 3 fms.; present price for driving 3*l.* per fm. A parcel of 20 tons of ore will be sold on Thursday week at Truro.

SORTRIDGE CONSOLS.—J. Richards, Jan. 10: Hitchins's Engine-shaft: In the 40, both east and west, the lode is 2 ft. wide, and consists of mundic, capels, and a little ore. In the 98 east the lode is 2 ft. wide, and yields good stones of ore. In the 62 west a cross-course has been met with, to the west of which no lode has yet been met with. In the 50 cross-cut south-east a branch has been met with 1 ft. wide, producing saving work. In the 50 east, on No. 2 south lode, the lode is 1 foot wide, unproductive. In the 40 east, on No. 2 south lode, the lode is being desued; when last taken down it yielded ½ ton of ore per fathom. In the stope in back of the 40, east of Barkell's rise, the lode is worth 3 tons of ore per fm. In the stope in back of the 40, west of Bartlett's rise, the lode is worth 2 tons of ore per fm. In Blanchard's winze, sinking below the 40, on No. 2 south lode, the lode is worth 1 ton of ore per fathom. In Dunn's rise, in the back of the 40 east, on No. 2 south lode, the lode is worth ⅛ ton of ore per fm. In the 30 east, on No. 2 south lode, the lode yields good stones of ore.

SOUTH CARADON WHEAL HOOPER.—W. C. Cock, Jan. 5: In the 47 cross-cut north the ground is a little harder. The 62 cross-cut and the engine-shafts are without any change to notice.

SOUTH CARN BREA.—T. Glanville, Jan. 9: In the new shaft the lode is 2½ ft. wide, composed of spar, peach, and copper ore, of a very promising character. The levels throughout the mine are looking much as usual. During the past week the severe weather almost stopped our surface operations. On Wednesday next we purpose going to smelting-house with about 8 tons of tin.

SOUTH CRENVER.—E. Chegwin, Jan. 8: We have dropped a lift from the 64 7 fms. below, and forked the water to-day. We intend dropping a lift to the 74, which will fork the water, so as to put the old lift to work again; then we hope

becomes a little more favourable we shall again resume sinking. In the adit end east the lode is from 2½ to 3½ ft. wide—good stamping work. We have here about 5 fms. to drive to the point where the shaft will come down. The walls for smith's shop, material house, &c., are almost up; these buildings will be completed as quick as possible.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—W. Roberts, Jan. 8: The following bargains were set on Saturday last:—The 50 cross-cut north by six men, at 10*l.* per fm. The adit to drive east on the caunter by four men, at 8*l.*, and adit west by four men, at 2*l.* 10s. per fm. I have no alteration to notice since my note to you of the 5th inst., when I considered the adit east, on the caunter, would about pay for driving.

SOUTH LADY BERTHA.—R. Unsworth, Jan. 10: In the 40 east the lode is 3½ ft. wide, producing quartz, capel, a little mundic, and copper ore, worth fully 1 ton of copper ore per fathom. In the stopes in back of 40, west of Leaman's rise, the lode is 3 ft. wide, worth 2 tons of ore per fm. In the 40 south, on south lode, the lode is from 1 to 2 ft. wide, producing stones of copper ore. No alteration to notice on any other part of the mine.

SOUTH WEST CARADON.—F. Pryor, Jan. 5: In driving west of Davey's lode we have cut a branch of ore in the back of the level. We shall commence a shaft as soon as the surface water will enable us to sink.

SOUTH WHEAL BETSY.—W. Stephens, Jan. 8: Ley's shaft has been sunk 3 ft. 6 in., and the ground of the same character as it has been for some time past, composed of capels and elvans.

ST. DAY UNITED.—E. Ralph, J. Cock, J. Gilbert, Jan. 5: At Trussall's north shaft, sinking below the 154, the lode is 2 ft. wide, producing 2 tons of ore per fm. In the rise above the 154 the lode is 2½ ft. wide, and producing 4 tons of ore per fm. In the 144, driving west, the lode is 2 ft. wide, and producing 2 tons of ore per fm. In the winze sinking below the 144, driving west, the lode is 3 ft. wide, and producing 1½ ton of ore per fm. At Billing's shaft, sinking below the 154, the lode is 4 ft. wide, worth 30*l.* per fathom. In the 154, east of shaft, the lode is 3 ft. wide, and worth 25*l.* per fm. In the 154 end, west of shaft, the lode is 2 ft. wide, and worth 15*l.* per fm In the winze sinking below the 144, west of shaft, the lode is 3 ft. wide, and worth 10*l.* per fm. In the 134, driving east of shaft, the lode is 4 ft. wide, and worth for tin and copper 10*l.* per fm. The stopes in this part of the mine are much the same as when last reported. There is nothing done at Bissoe Pool for this week, in consequence of the water being in caused by the heavy rain last Saturday. There is nothing new to report in Wheal Unity district.

ST. IVES WHEAL ALLEN.—H. Taylor, Jan. 10: At Giesler's flat-rod shaft the 50 east looks much the same as last week. In the 50 west the ground is hard, but a little more favourable for driving than last week; we expect a change here soon. The lode in the 40 east has not yet been intersected; the end still yielding water, which is a good indication of the lode being near us. The lode in the 40 west is 12 inches wide, but rather disordered at present by a crossing. The lode in the stopes in back of the 40 is 12 in. wide, and worth 6*l.* per fm. for tin; its appearance also is very promising. The lode in the 20, east of Louisa shaft, is 9 inches wide; producing tin, and promising to improve. We have not yet anything new in the adit east of Highburrow shaft, nor the adit cross-cut north of the same shaft. Other places much the same as last week.

TAMAR SILVER-LEAD.—Thos. Foot, Jan. 1: In the 237 south we are making fair progress in driving, and hope to reach the shoot of ore gone down in the level above in about four months from this time. The lode in the 226 south is 3 ft. wide, producing stones of lead, and very kindly. This end is 10 fms. further south than where the shoot of ore was met with in the level above, and it must, therefore, have dipped further south than expected. The two stopes in the back of this level produce 8 and 12 cwts. of lead per fm. In the 215 south the lode is 3 ft. wide, and yielding 13 cwts. of lead per fm.; the end is improved, and has now reached the north part of the main shoot of ore gone down in the level above. We have commenced sinking a winze in the bottom of this level, to prove the shoot of ore gone down in it, and expected ere this to have been reached in the 226. The stopes in the back of this level, three in number, will produce as follows:—No. 1, 12 cwts.; No. 2, 8 cwts.; and No. 3, 5 cwts. of lead per fm. The lode in the 205 south is 2 ft. wide, and will yield 10 cwts. of lead per fm.; this end is opening good profitable ground for stoping. The four stopes in the back of this level are producing as follows:—No. 1, 8 cwts.; No. 2, 6 cwts.; No. 3, 8 cwts.; and No. 4, 7 cwts. of lead per fm. The stope in the 35 is suspended, having become poor. We are happy to say that the cleaning of the pumps, which has been a very troublesome piece of work, is completed, except 15 fms., and this will be done this month. On this being completed the pitwork will be in capital condition, and in point of efficiency will be equal to new. The machinery throughout the mine is all in good order.

TOLCARNE.—Jan. 9: The lode in Field's shaft has not been taken down since last reported, in consequence of the shaftmen having been engaged in fixing a new lift in the 20, which is completed and working. The lode in the 20 end, east of shaft, is 20 inches wide, consisting of gossan and soft spar, and letting out plenty of water; the lode in the same level, west of shaft, is small and unproductive. The lode in the 10 end, east of shaft, is 1 ft. wide, yielding ½ ton of good ore per fm.; the lode in the 10 end, west of shaft, is 14 inches wide, consisting chiefly of soft spar. The lode in the adit end, east of shaft, is 15 inches wide, consisting chiefly of gossan and spar, a kindly looking lode, and letting out plenty of water. In the adit end east, on the south lode, the lode is 14 in. wide, consisting of gossan and good stones of grey ore, and is promising for further improvement. We have cut through the tin lode in the adit cross-cut south, and have put the men to open east on it. The tribute pitches are yielding fair quantities of ore.

TREFULACK UNITED.—Jas. Pope, T. Hodge, Jan. 9: We have drained the water about 15 fms. below the adit, but at present forking rather slow, we suppose on account of the old workings. We have timbered and cut down the engine-shaft about 9 fms., and hope to complete the shaft to the 16 in about a month from this time, when we shall commence clearing that level at once. We have cut down the Wood shaft, and secured about 8 fms., and shall have it to the 16 as soon as we can bring forward that level from the engine-shaft, when we expect to open some ground on the lode, and set some pitches to assist in defraying the expenses of working the mine.

TREGARDOCK.—Capt. Goldsworthy, Jan. 8: The lode in the adit end is increased in size, now about 1 ft. wide, composed of spar, mundic, and blende, and looking more kindly than it has been for 2 or 3 months past, though not of much value. I look forward for a further improvement. In the adit level, on the south branch, the lode is small, and the ground rather hard.

TREGULLOW CONSOLS.—F. B. King, Jan. 8: Since our last report of the mine we have taken down but little of the lode in our western shaft, which was then 1½ ft. wide, and producing fair tin work. The lode in our eastern shaft is near 2 feet wide, and has a very promising appearance. We are not doing so well in the No. 4 adit as I could wish, having had to clear a great deal of rubbish, the collar being very large, but I hope by this day week to get down on the back of the adit, where we hope to intersect one or two lodes between this and our next shaft.

TRELOWETH.—T. Richards, Jan. 5: The lode in the 134 east is worth 10*l.* per fm. The lode in the 134 west is poor. The lode in the 124 east is worth 8*l.* per fm. The lode in the 124 west is worth 4*l.* per fm. In the 116 cross-cut south we have not discovered the south wall of the lode. The winze below the 124, east of Cole's shaft, is worth 8*l.* per fathom. The stope in the back of the 134 east is worth 20*l.* per fm. The other stopes in back of the 124 and 116 fm. levels continue much as usual. The water is in fork, and the engine is working 7¼ strokes per minute.

— T. Richards, Jan. 10: The lode in the 134 end, east of Cole's shaft, is worth 8*l.* per fm. for copper ore. The stope in back of the 134 east is worth 15*l.* per fm. The 134 end west is poor. The 124 east is worth 8*l.* per fm. The 124 west is worth 3*l.* per fm. The winze below the 124 east is worth 8*l.* per fm. The south wall of the lode is not yet cut in the 116 end east. The stopes in working are just as for some time past in value. The engine keeps the water working about 7 strokes per minute.

TRENCROM.—R. Hollow, F. Bennetts, Jan. 9: The skip-road in Giesler's engine-shaft will be completed to the 90 this week, when the 90 will be driven east and west. In the 80, east of the engine-shaft, the lode is worth 8*l.* per fm. In the 80, west of the engine-shaft, the lode is worth 2*l.* per fm. In the winze sinking below the 70, east of the engine-shaft, the lode is worth 2*l.* 10s. per fm. In the 70, east of the engine-shaft, the lode is worth 3*l.* per fm. In the 60, east and west of the cross-cut, north-east of the engine-shaft, the lode is producing stones of tin. In the 60 cross-cut, north and south, east of the engine-shaft, no change. In the 40, west of the engine-shaft, the lode is worth 3*l.* per fm. In the 30, east of the engine-shaft, the lode is small and unproductive. In the 10, east of Hollow's shaft, the lode is worth 2*l.* per fm. In Hollow's shaft, sinking below the 10, the lode is worth 5*l.* per fm. In Mitchell's flat-rod, sinking below the 10, the lode is worth 5*l.* per fm.

UNITED MINES.—J. Tucker, Jan. 9: The shaft is sunk about 5 feet, which is pretty good sinking, considering the length of the lift we are sinking with (13 fms.) I hope by the end of this week, or very early in the next, to be deep enough to fix a standing-lift; after this greater progress will be made. I hope we shall be able to sink 3 or 4 fathoms with barrels, without a lift. The tribute pitches are without material change; they are fully manned, and the men are working well, and, I think, earning good wages. Our surface work is in a bad state, owing to the frost. We commenced burning, but after the house had been working three days, we were obliged to put out the fire, as our whits in the sieves are frozen almost as hard as iron. We are doing all that can be done, but cannot sample until the weather changes.

UNITED MINES (Tavistock).—J. Tucker, Jan. 8: All preparations necessary for sinking the engine-shaft are completed, and the following contract set to six miners and three labourers—to sink the shaft 12 fms. below the present bottom (48), cut cistern-plat, bearers and cistern, put in standing-lift, fix penthouse and brace, and all necessary timbers, stays, &c., for 162*l.*, or 168*l.* if completed in 16 weeks. Our pitches are yielding much the same as for some weeks past. The frost having gone off, we have resumed our dressing, and shall force it to the utmost.

WEST BASSET.—W. Roberts, Jan. 8: I have to notice an improvement in the 94, driving west of Percy's shaft, where the lode is 4 ft. wide, with a leader of ore on the north side, producing 2 tons per fm.; this end is now within 20 fms. of where Grenville's shaft will be brought down. All other parts are much the same as last reported. The tribute pitches are turning out well. The water is still rising on the engine nearly 2 ft. in 24 hours; it is now 3 fms. above the 124.

WEST CARADON.—F. Pryor, W. Johns, R. Trathen, Jan. 5: We are driving on Downing's lode, which we intersected in the 155, and as we are getting out of the influence of the cross-course the lode is presenting very good appearances, and yielding full 1½ ton per fathom. The 155, on Allen's or the main lode, is also improved, being worth full 1 ton per fathom. The 140 west, on Vivian's lode, is also producing ore, but not sufficient to value. The 90, west on Allen's, is producing occasional stones of ore. The 50, on Vivian's lode, is producing 1 ton per fm. The 17, on the north lode, is not looking quite so well, but is producing about 1 ton per fm. The 10, on Menadue lode, presents appearances that induce us to expect an early improvement. The 27, on Menadue, is a fine looking lode, and just getting in the run of ore ground gone down in the 17. The 104, on Vivian's, will produce 1 ton per fm. We are now driving the 17 east and west, on the north part of Gilpin's lode, from the cross-course. I would here remark that about 35 fathoms east of this cross-course we cross-cut for the lode, being of opinion it had not been seen, and that resulted in discovering a good lode of ore, now working at 3s. 6d. tribute. These ends have a very good appearance, and justify us in attaching considerable importance to this point. Our stopes and pitches are rather improved on the whole, and although our ends are not rich at present, they are more promising than for some considerable time past. We have sampled 320 tons, and have about 300 tons towards our next. We are a little late in consequence of the very severe weather, and not from want of ore. Pryor's shaft is down about 19 fms., and the channel of ground throughout the sinking, with the appearance of the lode, induce us to be very sanguine on this point.

WEST PAR.—J. Webb, Jan. 10: We have cut into the new lode about 5 fms. below surface, which is about 2½ feet wide, composed of a tin capel, and from its appearance I should say it will make at a greater depth. We have now two lodes within 20 fms. of each other—the south one is a copper lode, and the north one, noticed above, is a tin lode. Having shown the lodes so deep (about 5 fms.) as we can go for water at this wet season, I do not consider it necessary to do any more work for the present, and so shallow. We must now either put up some pumping-power, or wait for dry weather, to sink much deeper. I shall wait your instructions what to do.

WEST TREVELYAN.—John D. Osborn, Jan. 5: Cater's engine-shaft men have been engaged this week in cutting ground for bearers and cistern at the 48, preparatory to fixing the lift. We broke the balance-rod in the old engine-shaft, which has been repaired to-day without injury to the engine; this breakage has somewhat impeded our progress in Cater's shaft. In the 48 east there has been no lode taken down this week. In the 48 west we have broken some good stones of ore this week, lode 2½ ft. wide. The stopes in the back of the 48, west of Cater's, east and west of No. 1 winze, are worth for copper ore 8*l.* per fm. The stopes in the back of the 38, west of Cater's, are worth 10*l.* per fm. We have put four men to sink a winze in the bottom of the 38, under the above stope, where we have a good lode, but cannot report its value. The cross-cut driving north from Cater's at the 48, is driven 11 fms., the ground is a little harder for driving. We have hung a tackle on Park shaft, and the men are busily engaged in colliaring up the shaft, and when completed, we shall case and divide the same, and put in footway.

WEST WENDRON CONSOLS.—R. Kendall, Jan. 5: The water has been in all the week, and I am glad to say we have only 10 ft. more to drain; on Monday next I hope we shall be sinking. I hope in a week or ten days to have the engine-house up. We are getting on with the flat-rod shaft very well.

WEST WHEAL MARGARET.—Capts. Uren and White, Jan. 8: Saturday last being our setting-day, the following tutwork bargains and tribute pitches were set:—Hallett's shaft to sink below the 10, by eight men, at 12*l.* per fm.; the lode here is 18 in. wide, and worth 6*l.* per fathom; this shaft is sunk 8 fms. 4 ft. below the level, and about the latter end of next week we expect it will be down to the 20, when we shall commence to drive east and west on the course of the lode. A winze to sink below the 55, east of Essex shaft, by six men, at 6*l.* per fm.; this winze is sunk 4 fms. 5 ft. below the level, the lode in it is 3 feet wide, and worth 15*l.* per fm. The 65, to drive west from Essex shaft, by two men, at 5*l.* 10s. per fm.; the lode in this end is a little improved; it is 20 in. wide, producing stones of tin. The 65, to drive east of Essex shaft, by four men, at 5*l.* 10s. per fm.; lode small at present; about 7 fms. more of driving here will bring us under the winze sinking below the level above. The 20, to drive west of Dymond's shaft, by two men. at 4*l.* 10s. per fm.; the lode here is 12 in. wide, saving work for tin. We have twelve men on tribute, at an average of 10s. in 1*l.*

WEST WHEAL TOLGUS.—Jan. 9: We have dropped the lift 8½ fathoms below the 40, and the water is in fork at that depth. We hope to be able to drop the lift deep enough to drain the 50, where we shall fix the lift.

WHEAL AGAR.—Wm. Roberts, Jan. 8: In the 80, driving south from Windstow shaft, no lode yet; the end continues very wet. In the 70 west the lode, or part being carried, is 3 ft. wide, producing stones of ore; in the same level east the lode is 3 feet wide, producing stones of ore. Other parts are without any alteration worthy of notice since last reported.

WHEAL ARTHUR.—F. C. Harper, T. Carpenter, Jan. 8: We have an improvement at different points of operation in this mine, particularly on Watson's, or the tin lode. In the back of the 20, or 70 fms. from surface, the lode is quite 2 ft. 6 in. wide, composed of peach, quartz, mundic, and splendid work for tin. The stopes in back of the adit are also improved in appearance, the lode being about 3 ft. wide, carrying peach, quartz, and tin. We are pushing forward as fast as we can with the dressing of the stuff, but the severe weather has to a great degree retarded our progress, which we regret, as we are anxiously waiting the result as to value, &c.; no time, however, shall be lost in reaching the point in view.—Old Lode: In the 10, west of shaft, the lode is from 3 to 4 ft. wide, composed of mundic, quartz, iron and copper ore, and worth of the latter from 1 ton to 30 cwts. per fm. In the adit end we have no change to report.

WHEAL CREBOR.—J. Gifford, Jan. 8: We are progressing with the sinking of Cock's shaft with all speed; the lode appears to be coming larger in the east end of the shaft, and producing stones of copper ore and mundic. The cross-cut north in the 48 is driven about 10 fms.; in the present end we have intersected the south wall of a branch or lode, which is letting out much water; we have not yet cut into it, but shall do so to-morrow, when I will advise you. I have set the 42 to drive east of Cock's shaft, by two men and two boys, at 4*l.* per fm., stented the month. No lode as yet taken down. We have two men stoping the back in the 34, in the old workings; the lode is about 2½ feet wide, yielding saving work at the point where we are stoping. About 2 fms. before the present stope the lode appears to contain more ore, where I think we shall have a good orey piece of ground. We have two men clearing the 34; it is now made good to within 10 fms. of the east cross-course; so far as the lode can be seen it appears to be larger and kindlier in the 34 than it is in the 24. Every place is so much covered with the sediment of the water, that we cannot see what the lode is before it is broken.

— J. Gifford, Jan. 10: The branch met with in the cross-cut in the 48 is about 1 ft. wide, composed of capel, quartz, and mundic, with spots of copper ore. No alteration in any other part of the mine.

WHEAL CUPID.—R. Pryor, Jan. 5: The lode in the 65, east of engine-shaft, is 2 ft. wide, composed of spar, mundic, peach, and gossan, with stones of rich yellow copper ore; set to drive, by six men, at 6*l.* 10s. per fm. The lode in the 54 end is 2½ ft. wide, and will produce ½ ton of rich copper per fm. I may here remark this end has undergone a considerably change for the better within a day or two, and judging from its appearance, I think a further improvement may be expected; set to-day, to six men, at 4*l.* per fathom. The lode in the 40, east of this shaft, is 3 ft. wide, composed of mundic, and gossan, with some rich black copper ore intermixed; this end is still very changeable; set to six men, at 3*l.* 5s. per lm.; set to fill and land all the stuff that may be broken in the mine for one month.

WHEAL DAMSEL.—R. Pryor, Jan. 4: We have not made so much progress in forking the water during the past fortnight as we expected, in consequence of the lift coming in contact with some timber and stuff between the 20 and 30 fm. levels; this stuff we consider is from the old collaring of the shaft left by the former workers, we believe, however, that this can be cleared in a few days. Foxe's shaft we have cleared to the deep adit, level, and hope to complete the erection of the whim on the same during the ensuing week; when we shall at once uncover the shaft at this level, and case, divide, and put in footway in the same to the 20 fm. level; this will be pushed on with all speed. During the late heavy falls of snow and rain, our engine had no difficulty in keeping the water.

WHEAL EDWARD.—M. H. East, Jan. 5: South Lode: In the 92 east the lode produces stones of ore, and we have commenced to drive the 92 west, by the side of the lode. In the 81 east the lode is worth two tons of ore per fathom, and promising further improvement. In the 71 west the men are at present engaged shipping off the north part of the lode, and we hope to see something of the ore part by the middle of next week. In the 61 west the lode is large and maintains a good appearance, and will produce 4 tons of ore per fathom. In the 50 east the lode is large, being 4½ feet wide and yielding good saving work. In the same level, west of cross-cut, coming toward this point the lode, or the part that we are driving on, is small and poor, and at present I am not prepared to say the drivage at this point is on the main lode. I will endeavour to ascertain something about it early next week, and write you again on the subject. In the winze below the 50 east the lode is not quite so valuable as when last reported on, it is worth at present about 15*l.* per fathom for 12 ft. in length. In No. 1 rise, back of 50 east, the lode is worth about 1 ton of ore per fathom. In No. 2 it is worth 4 tons for length of rise, 12 ft. In No. 3 we are rising by the side of the lode. In the 50 west there is nothing new. In the rise and stope in the 40 east the lode produces a little ore of good quality, but we have suspended operations at this point, and put the men to sink the winze below the level, for the purpose of communicating with No. 1 rise in back of the 50, and when this work is done I am of opinion the ground will be worked at a more profitable advantage on tribute. In the 40 east there is a very promising lode 3 ft. wide, but the end will not be driven again before we hole the winze with the rise. The lode in the winze is worth 1½ ton of ore per fathom, and with good speed we hope to hole in about a fortnight. The water continues very quick, and is quite enough to control, and it seems as if every time we touch the lode in the 71 west we may expect a greater increase as we extend into the hill; this level has all the water in the western part of the mine; at this depth the 61 and all the shallow levels having been left high and dry since the 71 got up to the ore ground. We are preparing as fast as possible to relieve the engine, which, with all other machinery, is in good working order, and I am much pleased to say the mine presents encouraging prospects.

— M. H. East, Jan. 8: I have just come up from underground; the men are taking down the lode in the 70 west, and the ore part is increasing in size and value gradually; the lode altogether is 4 ft. wide, worth 12*l.*, and looks very promising. The lode in the 61 west, 7 fms. in advance of the 71, is worth full 20*l.*, and is as fine a looking lode as one can wish to see. Other points are without alteration.

WHEAL ELLEN.—N. T. Miners, J. Hosking, Jan. 9: We have continued to drive south from the diagonal shaft to cut the black lode, and south from the north shaft to cut the manganese lode. We are progressing favourably, and expect to cut the lode in each cross-cut shortly. In the 60, driving south, we have cut the new lode, and communicated with the 50; the new lode has a favourable appearance; it is 20 in. wide, composed of good dressing work for copper and blende; the old lode is 20 in. wide, worth 5*l.* per fathom. The sudden influx of water has prevented us doing anything on our new lode from the new shaft; this prevented us communicating with the 50. We are still rising against the shaft, and expect (as the water is going down) to hole in a few days. We have nothing new to report on elsewhere. On Tuesday last we sampled, computed, 77 tons of copper ore.

WHEAL FRIENDSHIP.—Jan. 7: The 220, east of Taylor's shaft, is under water. The lode in the 200, west of old sump-shaft, is 2½ ft. wide, and will yield ⅛ ton of ore per fathom. The lode in the winze sinking under the 190, west of old sump-shaft, is 2½ ft. wide—poor. The lode in the 190, west of old sump-shaft, is about 3 ft. wide, and worth about 1 ton per fathom. The stopes in the back of the 190, west of Burgoyne's winze, will yield 1 ton per fathom. The lode in the winze sinking below the 170, west of Rowse's winze, yields 1 ton of ore per fathom. The stopes under the 160, east of Crocker's winze, will yield 1¼ ton of ore per fathom (on north branch of south lode). The lode in the 40, east of Souden's winze, is from 18 to 20 in. wide—poor. The tribute pitches are without much alteration.—Kent's Lode: The lode in the 100, east of Brenton's plane, is 2 ft. wide—poor. The lode in the 100, west of Kent's shaft, is 18 in. wide, composed of mundic, spar, and peach. The lode in the winze sinking under the 60, east of Kent's shaft, is 3 feet wide—poor. The lode in the winze sinking under the 24, east of Kent's shaft, is 3 ft. wide, worth 1½ ton of ore per fathom. The lode in the 24 east is from 2½ to 3 ft. wide, and will yield ½ ton of ore per fathom. The lode in the winze sinking below the 12 is 2 ft. wide, and will turn out from ⅛ to ¾ ton of ore per fathom. The lode in the 12 east is 5 or 6 in. wide—poor. The two stopes in the back of the 12 will average 1 ton of ore per fathom. The lode in the adit end east is about 20 in. wide, poor, but more kindly than it has been. The two stopes in the back of the adit will average 1¼ ton of ore per fathom. In consequence of the frost the water is now up to the 190, and at the back of the 200, at old sump-shaft.

WHEAL GRENVILLE.—G. R. Odgers, Jan. 5: There is no alteration in the shaft or the 100 east of the shaft. In the 100 west the lode is 18 to 20 in. wide, producing some very good ore, kindlier than it has been since we have left the shaft, and I should say opening good tribute ground. The lode in the 90 east is small. In the 90 west there has been no lode taken down, but judging from where I picked into it, it maintains its size, and which I consider to be a good branch of ore. We purpose putting in some air-pipes from the waterfall here, by which means we think we shall be enabled to drive west on the south branch also, which is worth at present all of 10*l.* per fm. The lode in the winze sinking below this level will produce 1 ton of ore to the fm. The lode in the 80 west is without any alteration since my advice of Saturday, a kindly lode.—Watson's Lode: The 80, east of cross-cut, is small, but we are approaching the point, over which we had an orey lode in the 66. In the 66, east of cross-cut, no lode has been taken down this week. In the winze sinking below this level there is a good branch of ore. The engine is keeping the water admirably, and I think, on the whole, our mine is improving.

— George R. Odgers, January 10: We had a crush in the 100 fathom level east last night, which we hope to secure again shortly. The lode in the 100 west is from 18 in. to 2 feet wide, composed of quartz and prian, with grey and black ore; a kindly lode, where we are expecting an improvement. The lode in the 90 east is small. In the 90 west there is a good branch of excellent grey ore, from 10 in. to 1 ft. wide, and worth full 30*l.* per fm. In the winze sinking below this level there is a good branch of grey ore, worth 10*l.* per fm. All other bargains are progressing satisfactorily.

WHEAL GRYLLS.—E. Rogers, J. Pope, Jan. 10: Fisher's lode: At Annie's engine-shaft we have had some hindrances, therefore there has been but little done in the shaft for the week. In the 10 east the lode is small, and the price for driving 35s. per fm. In the end west the lode is also unproductive, driving at 30s. per fm. In the winze in the bottom of the adit the lode is 2 feet wide, producing good stones of copper ore, sinking at 50s. per fm.; at this level there are three pitches working, at 12s. in 1*l.* The flat-rod shaft is down 6 fms. 3 ft. below the deep adit level, the price for sinking is 9*l.* per fm. —Mill Pool Standard Lode: The 19 east is opening good tribute ground, driving at 20s. per fm.; in the back and bottom of this level there are seven pitches, working by 21 men, their tribute varying from 5s. to 12s. in 1*l.*, they paying all expenses.—Georgia Lode: In the stopes in back of the 33, No. 1 is worth 15*l.* per fm., stoping at 7*l.* per fathom; No. 2 is worth 12*l.* per fm., stoping at 6*l.* 10s. per fm.; No. 3 is worth 11*l.* per fathom, stoping at 6*l.* per fm. In the winze sinking in the bottom of the 33, west of the shaft, the lode is worth 14*l.* per fm., sinking at 8*l.* per fm. In the winze in the bottom of the same level, east of the shaft, the lode is worth 8*l.* per fm., sinking at 5*l.* 10s. per fm. We sampled on Friday, the 4th inst., 1691 barrows of tinstuff, which we estimate to be worth 620*l.*, and is for sale at the office to-morrow morning at 10 o'clock; we have also a small quantity of tin, which we intend to send to the smelting works, and expect it will realise about 100*l.*

WHEAL HARRIETT.—S. Williams, Jan. 5: The lode in the engine-shaft is unproductive; we are making fair progress. The lode in the 100, east end, is 1½ foot wide, worth 50*l.* per fm. The lode in the stopes above the 100 is worth 20*l.* per fm. The lode in the stopes below the 90 is worth 15*l.* per fm. The lode in the stopes above the 90 is worth 10*l.* per fm. The lode in the 30, east end, is producing stones of ore. The lode in the 10, east end, is 1 ft. wide—unproductive. The lode in the deep adit end is 1½ ft. wide, producing stones of ore, and very much disordered by the cross-course; there is no appearance of getting through it as yet, but we have driven 9 ft. in it.

WHEAL KITTY (Lelant).—Wm. Williams, Jan. 10: Gowan Lode: The lode at Wickett's shaft, sinking below the 30, is worth 9*l.* per fm. The lode in the 30 end, east of Wickett's shaft, is worth 5*l.* per fathom. The lode in the 30 end, west of Wickett's shaft, is disordered by a cross-branch; we are expecting an improvement in this end daily, as the level over was very productive. The winze sinking below the 20, east of Wickett's shaft, is down to the 30, and we have commenced driving west to meet the 30 end, east of Wickett's, where the lode is worth 4*l.* per fathom. There are six stopes working in the back of the 20, east and West of Wickett's shaft, worth on an average 6*l.* per fm. The lode at Philip's shaft, sinking below the 30, is worth 3*l.* per fm. The lode in the 30 end, east of Philip's shaft, is worth 6*l.* per fm. The lode in the 30 end, west of Philip's shaft, is worth 2*l.* per fm. The lode in the winze sinking below the 20, east of Philip's shaft, is worth 6*l.* per fm.—South Russoe Lode: There is a large lode in the 60 end east and west, also in the 50 end, east of Giesler's engine-shaft, producing tin, but not of much value. The lode in the 30 end, west of Giesler's, is small and unproductive.—United Part: The lode in the 160 end is small, and not of much value. The lode in the winze sinking below the 150 is worth 4*l.* per fm. The lode in the 130 end is worth 6*l.* per fm. The lode in the 110 end is worth 6*l.* per fathom. The pitches are producing about the same quantity of tin as for some time past.

WHEAL MARGERY.—R. James, J. Benbow, W. Rogers, Jan. 9: In the 100, west of American shaft, the lode is further improved, worth 18*l.* per fathom for copper ore; this is a good feature for sinking below. All other parts are without change.

WHEAL MARY ANN.—P. Clymo, H. Hodge, J. Harris, J. Stevens, Jan. 10: The cross-cut at the 170 is extended 16 fms. towards the lode. In the 160 north the lode is 1½ ft. wide, worth 4*l.* per fm.; in the same level south it is 2¼ ft. wide, and worth 8*l.* per fm. In the 150 north it is 2 ft. wide, and worth 7*l.* per fm.; in the same level, south of Clymo's shaft, it is 3 ft. wide, and worth 11*l.* per fm. In the 140 north it is 2 ft. wide, and worth 8*l.* per fm.; in the same level, south of Clymo's shaft, it is 3 feet wide, and worth 10*l.* per fathom. There is nothing new in the 110, south of the slide. Clymo's shaftmen are engaged in casing and dividing the shaft from the 140 to the 150. The stopes and pitches are producing much as usual. We sampled on the 8th inst. two parcels of lead ore—No. 1, computed 75 tons; and No. 2, 54 tons, for sale on the 15th inst.

WHEAL MARY EMMA.—Capt. Doble, Jan. 9: On Saturday last I let the western stopes to six men, at 5*l.* 10s. per fm. There is a good lode of tin in the stopes when taken down last; if it continues, the men will break a fine pile of tinwork this month. The lode in the eastern stopes is of a large and promising character.

WHEAL NELSON.—J. Angove, Jan. 5: We have let the water down in the adit, and set the engine at work to-day, and if all be well we shall fork to the 44 fm. level in the course of next week. You shall hear from us daily with regard to the forking.

— J. Angove, Jan. 6: The water is now down 10 fms. below the adit level, and engine working well.

— J. Angove, Jan. 8: I beg to inform you we are now in fork to the 22. The engine and pitwork are in good working order.

WHEAL NORRIS.—James Nance, Jan. 5: The men in the east shaft are employed in making preparations for sinking by aid of the 5-in. pumping-lift, and hope to resume the sinking in a few days. The No. 3 lode, in the adit end east, is rather better in quality than it was a week ago. We have been trying to urge on the masons to complete the boiler-house and flues against next Saturday; but the work is very much impeded in consequence of the severe frost. We shall use every means in our power to get it done by that day.

WHEAL POLLARD.—William C. Cock, Jan. 5: We have taken out the boiler, and have commenced taking off the damaged plates, and I am glad to say that it is not near so bad as I thought to find it. I hope we shall have it in its place again by this day week.

WHEAL PROSPER.—H. Stephens, Jan. 9: The 20 has only now commenced driving, having been delayed for want of sawyers to cut timber for casing and dividing the shaft, consequently there is no change to report here. The 10, east of engine-shaft, continues much the same as last reported—worth 26*l.* per fm. The 10, east of Leeds, is worth 9*l.* per fm., and improving as we approach the rich tin ground sunk upon below the adit, 8 fathoms in advance of the end. The 10 west is worth 4*l.* per fm. The stopes and pitches are looking very well throughout the mine.

WHEAL PROSPIDNICK.—R. Kendall, Jan 5: Wilson's shaft has been sunk this week 3 ft.; the lode is still large, improving in quality, and losing its gossan. Watson's shaft has been sunk 6 ft.; lode 12 in. wide, disordered by a cross branch. I think the next taking down will be better. Next week we shall commence sinking a winze west of the shaft; this winze will lay open some tin ground. We are pushing on our surface work as fast as possible. I expect the axle home next week.

WHEAL SICILY.—Jan. 9: The engine-shaft is down about 12½ fms. We have had a little stiffer floor of ground, which has rather impeded our sinking, but we are now through it, and the ground is of the same highly promising character as heretofore, and contains a greater proportion of mundic and copper as we get deeper. I hardly expect we shall reach the 20 by the end of the month, but we will do our utmost.

WHEAL TRELAWNY.—W. Jenkin, W. Bryant, T. Grenfell, Jan. 10: North Mine: Smith's shaftmen are still engaged in cutting a trip-plat in the 172. The lode in the 162, north of Smith's shaft, is 2 ft. wide, worth 7*l.* per fathom; in the same level south the lode is 2 ft. wide, worth 9*l.* per fathom. In the 152 south the lode 1½ ft. wide, worth 5*l.* per fathom; in the same level, north of Chippindale's shaft, the lode is 2 ft. wide, worth 7*l.* per fathom. In the 142 fathom level north the lode is 1 foot wide, worth 7 per fathom. In the 132 fm. level north the lode is 2 ft. wide, worth 5*l.* per fathom. Last night the fend-off bob, at the point of underlie at Smith's shaft, broke in course of working, the reparation of which is progressing favourably, and we hope to get it to work again by to-morrow morning.—South Mine: In the 152, south of Trelawny's shaft, the lode is 3 ft. wide, worth 5*l.* per fathom; in the same level north the lode is 2 ft. wide, producing a little ore. In the 142 north the lode is 2 ft. wide, worth 10*l.* per fathom. There is no alteration to notice in the 130 north since last report. We are still driving the 107 north in killas by the side of the lode. The stopes and pitches are without any alteration to notice.

WHEAL TREVELYAN.—P. Floyd, H. Floyd, Jan. 3: At the engine-shaft the ground still continues favourable for sinking, and the men working well. The lode in the 60, driving east, is 4 ft. wide, spotted with grey and yellow copper ore, and presents every indication for producing ore in depth; the lode in the western end presents similar appearance. The stopes in the bottom of the 20, at King's, are worth 12*l.* per fathom; stoping at 30s. We have not yet cut the Mill Pool standard lode at the 30, but expect to do so very soon. In consequence of the recent heavy falls of snow and rain the water is considerably increased, and has retarded our operations. Our monthly sale of tinstone realised 439*l.* 18s. 6d. Our prospects, on the whole, are very encouraging.

— P. Floyd, A. Floyd, Jan. 10: We beg to inform you that the engine-shaft is now down about 8 fms. below the 60; the ground is still favourable for sinking, and quite congenial for copper. At King's we have cut the Millpool standard lode; it is about 3 ft. wide; producing good work for tin; but we have not yet seen enough of it to ascertain its real value, but in our next we shall be able to speak more fully of it. The lode in the 20, west of King's is 4 feet wide; worth 10*l.* per fm.; driving at 5*l.* All other places are as last reported.

WHEAL UNION.—T. Glanville, Jan. 9: In the flat-rod shaft, sinking below the 46, the lode is 2 ft. wide, composed of spar, mundic, copper, and tin ore, worth for the latter 10*l.* per fm. The other parts of the mine are much as usual.

WHEAL UNITY CONSOLS.—W. H. Reynolds, Jan. 5: The water is nearly in fork again at the 75, and we hope to resume sinking the flat-rod shaft on Monday.

WHEAL WREY CONSOLS.—P. Clymo, W. Hancock, M. Whitford, Jan. 9: The sumpmen are now engaged fixing a 10-in. drawing-lift from the 96 to the 106, with other work, preparatory to our sinking under the 106. The lode in the 106 north is 3½ ft. wide, producing 6 cwts. of lead per fm.; in the same level south it is 1½ foot wide, producing 4 cwts. of lead per fathom. In the 96 north it is 2½ ft. wide, producing 8 cwts. of lead per fm.; in the same level south it is 2 ft. wide, yielding 6 cwts. of lead per fm. In the 84 north it is 3 ft. wide, producing 9 cwts. of lead per fm.; in the same level south it is 3½ ft. wide, yielding 7 cwts. of lead per fm. In the 74 north it is 2 ft. wide, producing 5 cwts. of lead per fm.; this level south is at present supended, being extended near to the boundary. In a winze sinking under the 64 north the lode is 2 ft. wide, producing 6 cwts. of lead per fm. The 64 and 54 north are suspended at present. The stopes and pitches are producing much as usual.

WILLOW BANK.—J. Boundy, Jan 7: We are again idle here in consequence of the severe weather; the water was in fork on Friday, and the men worked one stem in their bargains, but on Saturday were obliged to stop the wheel again. Owing to the frost the adit level has been very much injured, so much that we were obliged to timber it: this I have let as a bargain to secure for 4*l.* All the other parts of the mine are much the same as last reported.

WORVAS DOWNS.—R. Harry, Jan. 9: The stopes in back of the adit on Wheal Flat lode are yielding about the same quantity of tinstuff as for some time past. The ground about the lode in these stopes consists of a beautiful decomposed granite, highly mineralised throughout, and quite congenial for the production of tin. The balance-bob pit is completed, and the masons are now engaged in building the walls of the boiler-house. The engineers are progressing favourably with the erection of the engine, and the shaft-men in fixing the pitw

A PROFITABLE MINING DISTRICT.—It must be highly gratifying to everyone connected with the Liskeard district to reflect on the almost unprecedented success that has attended its mining operations. The large number comparatively of its dividend mines, and the amount paid by them; their future prospects, as well as those of its progressive mines, and the district generally, merits for it a distinction that can scarcely be claimed for any other. It may not be generally known that 400,000*l.* is the maximum estimate of the entire original outlay of the district, and that dividends amounting to 474,156*l.* has already been paid, and upwards of 100,000*l.* in lord's dues. When this is considered, in connection with the commercial value of the property, which cannot be estimated at less than 700,000*l.*, it will not, surely, be successfully disputed that the district is without a parallel. The steady progress with which it has advanced, the stability assumed and maintained when progress is professed and admitted in one of its leading local peculiarities, and at the same time is one of its finest bulwarks. It cannot fail to be observed, that in seasons of fearful reaction, when other districts have been convulsed and panic stricken, this has advanced, unmoved, and unaffected, as if entirely exempted from all extraneous influences. This is to be attributed, in the first place, to the good character of the district, but principally to the integrity, independence, and perseverance of its leading agents, supported by the intelligence and wealth of the neighbourhood. Some of its proudest achievements have resulted from this; mines that were trodden down and depressed have been raised to profitable distinction and value, and others that were worthless and unworthy have been consigned to oblivion. Pleasing as the reflection of the past is, the future is no less flattering. There is almost a moral certainty that in copper it cannot decrease, whilst in lead appearances are favourable to maintain its position, and its recent but substantial indication for tin will be hailed by every true friend of mining as a valuable accession to the metallic wealth of the district.

DIVIDENDS.—During the past quarter there has been declared on mining shares the sum of 119,999*l.* 10s. 10d., against 149,320*l.* 6s. in the previous quarter—showing a decrease of 29,320*l.* 15s. 2d. The total for the quarter is made up by 87,699*l.* 10s. 10d. on home mines, and 32,300*l.* on foreign, a decrease in both instances. The former is made up by English and Welsh mines alone, Ireland and Scotland not having contributed towards the total. During the year 1860, 624,728*l.* 2s. 6d. was paid—made up by 432,763*l.* 7s. 6d. declared on English, Irish, and Welsh, and 191,964*l.* 15s. on foreign mines. These figures, however, must be accepted with some degree of caution, as through our inability to obtain returns from some private companies we are only enabled to furnish such particulars as have come to our knowledge. Mining has now become a very important commercial feature, not only as a speculation, but as an investment, and demands that publicity should be given to every particular relating thereto, more especially to the amount realised in dividends, to enable a correct estimate to be formed; and this view will ultimately, we are assured, be fully impressed on those connected with the details, and such statements furnished as will guide the public, not only as to the mines to invest in, but the localities most likely to prove productive. The return does not exhibit such an increase on the amount of the previous year as from the favourable prospects that were exhibited at its commencement, we were led to expect, and only illustrates the uncertainty of mining; although it is a matter of argument—taking into consideration the rapid advance in price of shares on a discovery, and, if that discovery prove lasting, the profit that results on the amount paid—whether mining presents greater uncertainty than other commercial pursuit: but let this be as it may, the returns for the year show that both English and foreign mining is steadily progressing, although not making such strides as some anticipated, and that where *bona fide* concerns are brought forward public support is sure to be granted, while from the number of promising speculations that are now being worked we cannot but expect that the amount returned during the present year will considerably exceed the total above given.

FIRE-DAMP IN COAL MINES.—Dr. Gesner, in his very interesting "Practical Treatise on Coal, Petroleum, and other Distilled Oils," referring to the vegetable origin of coal, remarks that the gases of deep coal mines are very similar to those of gas manufactories, and such as are produced by a high temperature. The deeper the mine the greater is the discharge of carburetted hydrogen. It is to the internal heat of the earth and other chemical agencies, combined with causes of less force, that we must chiefly ascribe the transmutation of wood into coal. The similarity of the distilled products of wood and coals, and of charcoal and coke, should not be overlooked in seeking for proofs of the vegetable origin of coal. In mines of lignite and Cannel coal, carbonic acid or chokedamp is almost the only gas present. In lower coal mines, or those that have been longer under the influence of heating and other chemical agents carburetted hydrogen or fire-damp predominates.

THE COAL SUPPLY TO THE METROPOLIS.—The quantity of coal and coke carried into the metropolis for the year ending Jan. 1 shows an enormous increase on preceding years. No less than 1,477,545 tons 16 cwts. have been conveyed from various parts of England to London by the railways having access thereto, the London and North-Western and the Great Northern carrying the vast proportion. The following is the actual tonnage of each railway company:—The London and North-Western, 693,418 tons 16 cwts.; Great Northern, 502,813 tons 14 cwts.; Eastern Counties, 121,225 tons 16 cwt.; Great Western, 63,944 tons; Midland, 58,490 tons; South-Western, 17,582 tons 6 cwts.; South-Eastern, 14,585 tons 8 cwts.; Hertford, Luton, and Dunstable, 4416 tons 19 cwts.; London, Tilbury, and Southend, 958 tons; and the London and Brighton, 104 tons. Of this aggregate one-ninth has been produced from the Claycross pits, near Chesterfield. For the year the seaborne importation has been 3,573,377 tons, brought by 11,226 ships, against 3,299,170 tons by 10,693 ships, being an increase of 274,207 tons and 533 ships.

THE COAL FIELDS OF GREAT BRITAIN.—The probable duration of our coal fields is a subject so interesting, that Mr. Hull's "Treatise on the History, Structure, and Duration of the Coal Fields of Great Britain" (published by Stanford, Charing-cross) will, doubtless, receive an ample share of patronage. Mr. Hull's connection with the Geological Survey of Great Britain has naturally given him many opportunities for gaining reliable data, and in the book which he has produced he gives ample evidence of having used them to the best advantage. We shall take an early opportunity of referring more fully to his very valuable volume.

The present severe weather will probably interfere with traffic on many lines; but, on the other hand, the railways will derive considerable benefit from the coal trade. The demand for coal is at present extraordinarily active, and as all the canals are frozen, the traffic will be turned on to the railways.

TWO COLLIERIES ON FIRE.—On Monday morning, the colliery of the Messrs. Knowles & Co., known as the Cockey Moor Pit, Radcliffe, was discovered to be on fire. Mark Todd, the manager, immediately exerted himself to save the lives of the miners. It was supposed that there were about 60 in the pit, and they all succeeded in making their escape, some of them with great difficulty. The manager dragged one person to the eye of the pit, when he was in a very exhausted condition. It was ascertained that all the colliers were safe, but the manager, contrary to the wishes of the rest, was determined to save the life of a pony. In making the attempt he was suffocated, and last evening the body had not been recovered. The coal at the bottom of the pit was still on fire. The unfortunate man has been seen several times; but it was not considered possible to reach him with safety. He was lying on his back, and appeared to be much disfigured.——At an early hour yesterday morning, a fire was discovered in a coal pit at Earl Fitzwilliam's bank top, Rawmarsh, near Rotherham. The origin of the fire is not known. It is ascribed by some to incendiarism, and by others to accidental causes.—*Manchester Guardian.*

A GOOD EXAMPLE.—At the usual Christmas dinner of the workmen in the employ of Mr. Thomas Dunn and Co., of the Windsor Bridge Iron-works, a handsome present was given to the men by Mr. Thomas Dunn, in the form of a library for the use of the workmen and their families, containing upwards of 300 volumes of scientific, useful, and entertaining books. The men passed a vote of thanks, expressing their appreciation of so useful an object to the works, and their hopes that such libaries would become general.

AN IMPRUDENT AGENT.—(*From a Correspondent.*)—As an instance of how serious troubles sometimes arise from conduct over which the principals of large concerns have no control, it appears that the colliers engaged at Mr. Crawshay Bailey's pit at Aberaman, were on Friday called from their work to sign certain bye-laws drawn up by a new agent, which they refused to do; they were, therefore, prevented from working until the following Monday, when Mr. Bailey called a meeting at the Swan Inn, and informed them that they could recommence work under the old rules. Mr. Bailey, it is said, knew nothing of the bye-laws until Monday evening, when he gave the workmen liberty to abide by the rules they had been accustomed to.

TESTIMONIAL TO A COLLIERY VIEWER.—On New Year's Eve a circle of friends and a few of the workmen under Mr. John Swallow, viewer of the Harton, Whitburn, and Hilda Collieries, assembled in the colliery office, for the purpose of presenting testimonials to Mr. and Mrs. Swallow, in the shape of their portraits painted in oil, life size and in beautifully gilded frames, as tokens of the estimation in which they are held by their friends. The likenesses, we understand, are excellent, reflecting upon the artist, Mr. James, of London, the highest credit.—*Gateshead Observer.*

PATENT WOOD, OR FIBROUS SLAB COMPANY.—The list of contributories of this limited company will be settled in the Court of Bankruptcy on Jan. 31.

GREAT WESTERN COAL COMPANY.—Vice-Chancellor Kindersley will settle the list of contributories of this limited company on Thursday next.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending January 6, was 988*l.* 4s. 1d.

THAMES TUNNEL COMPANY.—Receipts for the week ending Jan. 5, 108*l.* 7s. 1d.; number of passengers, 26,005.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, January 11, 1861.

COPPER.	£ s. d.
Copper wire .....p. lb.	0 1 1 –0 1 1¼
ditto tubes ..... „	0 1 1½– —
Sheathing & bolts .. „	0 0 11½– —
Bottoms ..... „	0 1 0 –0 1 0¼
Old (Exchange) .... „	0 0 10 – —
Best selected....p. ton	105 10 0– —
Tough cake..... „	102 10 0– —
Tile ..... „	102 10 0– —
Burra Burra .... „	103 0 0– —
Copiapo ..... „	95 10 0–96 10 0

IRON.	Per Ton.
Bars, Welsh, in London..	7 0 0– —
Ditto, to arrive	6 7 6– 6 10 0
Nail rods	7 0 0– —
„ Stafford. in London	7 12 6– 8 0 0
Bars ditto	8 0 0– 9 10 0
Hoops ditto	8 17 6– 9 15 0
Sheets, single	9 0 0–10 10 0
Pig, No. 1, in Wales ..	3 0 0– 4 0 0
Refined metal, ditto....	4 0 0– 5 0 0
Bars, common, ditto....	5 10 0– 5 12 6
Ditto, merchant, in Tees	6 15 0– 7 0 0
Ditto, railway, in Wales	5 12 6– —
Ditto, Swed. in London.	11 10 0–12 0 0
To arrive	— – —
Pig, No. 1, in Clyde....	2 2 0– 2 10 0
Ditto, f. o. b. in Tees ..	2 17 0– —
Ditto, forge, f.o.b. in Tees	2 8 6– 2 10 0
Staffordshire Forge Pig.	3 10 0– 3 12 6
Welsh Forge Pig	— – —

LEAD.	
English Pig	21 10 0–22 10 0
Ditto sheet	22 5 0–22 10 0
Ditto red lead	23 15 0–24 0 0
Ditto white	30 0 0–31 0 0
Ditto patent shot	24 10 0–24 15 0
Spanish	20 15 0–21 0 0

BRASS.	Per. lb.
Sheets	9¼d.–10¼d.
Wire	9¾d.–10d.
Tubes	11¼d.–11¾d.

FOREIGN STEEL.	Per Ton.
Swedish, in kegs (rolled)	16 10 0– —
„ (hammered).	17 5 0–18 0 0
Ditto, in faggots	18 10 0–19 0 0
English, Spring	18 0 0–23 0 0
Bessemer's, Engineers Teel	44 0 0– —
„ Spindle	30 0 0– —
QUICKSILVER	7 0 0 p. bottle

SPELTER.	Per Ton.
Foreign	18 5 0–18 10 0
To arrive	19 0 0–19 5 0

ZINC.	
In sheets	25 0 0–26 0 0

TIN.	
English, blocks 132	0 0– —
Ditto, Bars (in barrels)..133	0 0– —
Ditto, Refined 134	0 0– —
Banca 134	0 0–134 10 0
Straits 128	0 0– —

TIN-PLATES.*	
IC Charcoal, 1st qua. p. bx.	1 10 0– 1 11 0
IX Ditto 1st quality „	1 17 0– 1 18 0
IC Ditto 2d quality „	1 8 0– 1 9 0
IX Ditto 2d quality „	1 15 0– 1 16 0
IC Coke ..... „	1 4 0– 1 5 0
IX Ditto..... „	1 10 0– 1 11 0
Canada plates ....p. ton	13 0 0–13 10 0
In London; 20s. less at the works.	
Yellow Metal Sheathing... p. lb.	9½d.
Indian Charcoal Pigs in London	— – 6 10 0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—Extreme dullness prevails in almost all descriptions of metals, for what with the high rate of discount in the money market and the entire cessation of American orders (the former most effectually checking speculators, and the latter materially reducing the genuine demand), the stagnation is almost universal, and it is only forced sales, made by weak holders at enormous sacrifices, that form the staple business of the week.

COPPER.—The market is very quiet, and orders for sheet and sheathing scarce; nor can we hear of any large contracts having been made in cake or ingot, though, according to the standard of ores, the present price is very low. Some slight enquiry exists for foreign, but copper is too valuable a metal to hold with money at 7 per cent.; speculators, therefore, are very shy. Chili quoted 90*l.* to 91*l.*; Burra Burra, 102*l.* 10s. to 103*l.*; Copiapo, in large quantities, 95*l.* to 96*l.*; Spanish, 95*l.* to 96*l.*

IRON.—Rails in fair demand. Merchant bars have given way a trifle, and some business has been done, but the makers are still wanting orders, and, unless the demand increases, it is probable that a further reduction in price may result. Staffordshire makes are quoted as before, but very dull of sale. The American market, one of the largest consumers, being for the time almost closed has a very depressing influence. Swedish bars, Indian specifications, in demand, at about 11*l.* 10s. Scotch pigs have during the week fluctuated between 50s. and 49s., only a small amount of business having been transacted; closing price to-day, 49s., m.n.

LEAD.—Pig in pretty good request, and firm at former quotations; very little enquiry for sheets. Spanish pig, good soft quality, will fetch from 20*l.* 10s. to 20*l.* 15s. Hard, 20s. per ton less.

STEEL.—Swedish keg and faggot unaltered; little or no demand; few, if any, shipping orders in the market.

SPELTER.—In consequence of the monetary pressure some needy holders of this metal have been forced to realise at a considerable reduction in price, but the majority of holders are not now in the market; and even at the reduced rates buyers are not particularly eager to operate. The present quotation is nominally 18*l.* 5s. to 18*l.* 10s. One hundred and fifty tons are reported to have been sold at 18*l.* 15s. for spring shipment.

TIN.—On the 17th inst. the smelters of English announced a reduction of 4*l.* per ton on blocks, bars, and refined, reducing the quotation to 132*l.* for block, 133*l.* for bars, and 134*l.* refined. In foreign no business to report; quotations nominal.—TIN-PLATES can now be bought at 24s. for IC coke, and 30s. to 31s. for IC charcoal; very dull of sale.

LIVERPOOL, JAN. 10.—Our Iron Market is in a most depressed state, owing mainly to the untavourable news from the United States. The advance in the rate of discount has also had a very bad effect. The American houses here are disinclined to operate, even to the smallest extent, unless at prices much below those hitherto current. The orders arriving per steamer are very few indeed, and only for particular descriptions. Scotch pigs have receded, and the market is quiet. If money becomes dearer they will decline further, in all probability, and attract speculators; the present price is unremunerative to the producers. The orders from the East Indies, Mediterranean, and other markets, are very light. Our greatest encouragement is that the demand for spring shipment to Canada and other parts of British North America is just commencing, and will likely be fully as good as last year. Tin-plates are dull of sale, and considerable quantities are held in second hands. Block tin was reduced on the 7th inst. 4*l.* per ton, being the only change since Feb. 3, 1860; this will assist the tin-plate makers. The ironmasters' quarterly meeting was held this day in Birmingham. No nominal change was made, but underselling is quite general, to meet the present exigencies of the trade.

WOLVERHAMPTON.—From Mr. S. Griffiths's "Iron Trade Circular:" Current prices of pig iron (corrected to Thursday evening):—Staffordshire cold blast, 4*l.* 5s.; Old Windmill End All Mine, Nos. 1 and 2, melters, made with Lord Ward's thick coal warm air, 4*l.*; Old Windmill End All Mine Forge Mine pig-iron, made with Lord Ward's thick coal, Nos. 3 to 6, 3*l.* 12s. 6d.; best native hydrate pigs, 3*l.* 10s. to 4*l.*; first-class All Mine grey forge pigs, 3*l.* 5s. to 3*l.* 10s.; good mine pigs, with a modicum of flue cinder, 2*l.* 12s. 6d. to 2*l.* 17s. 6d.; mine pigs, deteriorated by cinder, 2*l.* 7s. 6d. to 2*l.* 12s. 6d.; Cleator Moor hematites, 3*l.* 10s. to 3*l.* 11s. 3d.; Barrow hematites, 3*l.* 10s. to 3*l.* 11s. 3d.; Workington hematites, 3*l.* 7s. 6d. to 3*l.* 8s. 9d.; Kirkless Hall hematites, 3*l.* 5s. to 3*l.* 6s. 3d.; grey forge cinder pig-iron, 2*l.* 5s. to 2*l.* 10s.; white forge cinder pigs, 2*l.* 2s. to 2*l.* 7s. 6d. ordinary melters, Nos. 1, 2, and 3, 2*l.* 12s. 6d. to 2*l.* 17s. 6d.; superior makes of mine melting iron, 3*l.* 2s. 6d. to 3*l.* 15s., according to make and quality. The above prices are all delivered on to the wharves at the South Staffordshire manufactories. Favourite Shropshire and Forest of Dean brands, 4*l.* 10s. delivered; northern hematites, from 3*l.* 5s. to 3*l.* 11s. 3d., according to brand or quality.

NEWCASTLE-UPON-TYNE, JAN. 10.—The Pig-Iron Manufacture in the North of England, notwithstanding the long and trying depression to which it has been exposed, has maintained (during 1860) the high position to which it so rapidly attained. A more vigilant control having been exercised over the make than has been the case in other districts, heavy accumulation of stocks has been avoided. There are 93 furnaces in all, 65 of which are now lighted. Eight furnaces are in course of erection, and most of which are nearly completed. Throughout the past year 68 furnaces have been in operation, and the total yield of pig-iron may be estimated at 633,000 tons, being slightly in excess of the make of 1859, from the same number of furnaces. Notwithstanding this large production, a market has been found for the whole, and rather more, as there is a diminution of the stock in hand, since the commencement of the year, of 12,000 tons. This consumption is the more surprising, seeing that the foreign exports have continued small, not exceeding 64,696 tons (being, however, 17,762 tons over the exports of the preceding year), and shows that the demand for Cleveland pig-iron in other markets has kept pace with the manufacture of the article.—RICHARD HOYLE.

COAL MARKET.—On Monday, the frost continuing very severe, there was a brisk demand for house coals, at fully 1s. per ton advance of prices. In Hartley's and manufacturers' a fair amount of business; prices without alteration. Best house coals, 25s. 6d. to 26s.; seconds, 22s. to 24s.; Hartley's, 16s. 6d. to 17s. 3d.; manufacturers', 16s. to 18s. per ton.—On Wednesday 43 arrivals. The navigation of the river being much impeded by ice, the business in house coals was confined to small vessels, for delivery at wharves down the river, prices of which were about 6d. per ton higher. Hartley's and manufacturers' continued a good business, at fully last quotations.—On Friday, 36 arrivals. The ice in the river put a stop to all business in house coals, except for a few cargoes to deliver clear of the Pool; prices nominally the same for all descriptions. Best house coals, 26s. to 26s. 6d.; seconds, 22s. to 24s.; Hartley's, 16s. 6d. to 17s. 6d.; manufacturers', 16s. to 18s.: 13 cargoes unsold—150 ships at sea.

BRITISH COAL EXPORTS IN NOVEMBER.—From the Monthly Circular of Messrs. W. and H. Laird, of Liverpool, issued yesterday, it appears that the coal exported from British ports in Nov. last was 529,841 tons, against 458,647 tons in the same month of 1859. The total exports in 1860 from Jan. to Nov. were 6,388,354 tons, being an increase of 263,644 tons in the same months of 1859. The exports for Nov. were as follows: From the Northern ports, 258,785 tons; from the Yorkshire ports, 28,800; from Liverpool, 28,515; from the Severn ports, 169,029; and from the Scotch ports, 44,712 tons.

The following are particulars of Coals shipped to London last month:—

Ports.	Ships.	Tons.
Newcastle	418	152,665
Seaham	36	8,913
Sunderland	231	85,980
Middlesbro'	16	4,746
Hartlepool and West Hartlepool	220	64,689
Blyth	11	3,229
Scotch	8	1,849
Welsh	23	6,896
Yorkshire	34	2,755
Small	4	86
Cinders	4	462
Total imported in December, 1860		Tons 332,290
Total imported in Dec., 1859, coal, culm, and cinders		333,431

Comparative Statement of 1859 *and* 1860.—Imported from Jan. 1 to Dec. 31, 1860, 11,226 ships, 3,573,377 tons; imported from Jan. 1 to Dec. 31, 1859, 10,693 ships, 3,299,170 tons; increase in the present year, 533 ships, 274,207 tons. Inland coals brought by railway and canal, &c., and entered at the coal market during Dec., 1860, 168,391 tons 9 cwts.

We remember a few years ago, when the discoveries of gold were first made in California and Australia, how the alarmists—some of them men of mark in monetary circles—would say that our sovereigns would be reduced in a few years to the value of shillings, and from the depreciation in the value of gold a complete revolution would take place in our monetary affairs. Well, since that time some hundreds of tons of gold have been brought to this country; the production still goes on, and instead of being cheaper, we find our sovereigns getting dearer, and whenever there is an extra demand for them the Bank directors have to put on the screw, by raising the rate of discount!

It was the same in regard to copper when the great riches of the Burra Burra Mines were discovered: our English mines, according to the alarmists, were to be ruined outright through the depreciation in the value of copper. And now, whenever the papers announce, as they sometimes do, some great metallic discovery abroad, our alarmists come to us, and seriously ask if it would not be wise to get out of Cornish mines at once? May they not learn a lesson from the state of the market for gold? It appears that whenever great discoveries take place new wants are created, and new markets and fields of enterprise opened out, so that the demand keeps up, at least, to the supply; and if we had not the gold question before us, to show the fallacy of the wisest prognostications at times, we should not fear for our home mines, whatever discoveries might be made abroad, for we believe that, with a fair price for their produce, they may defy the competition of the world. The Bank directors opened the market this week by raising the rate of discount on Monday morning to 7 per cent. This measure, rendered necessary by the exigencies of the moment, although it may be severely felt for the time, will ultimately prove of benefit to the monetary world. Just now, the Americans prefer gold to paper; and instead of bills, which would have to be met in three months' time, we are paying them in cash for corn and other goods, thus causing a mere temporary drain. It is, in fact, like making a call on a cost-book mine for three months in advance, and which is always, though sometimes unpalatable, beneficial and sound.

With the state of the Money Market, and the dressing-floors of the mines frozen up through the continued severity of the weather, it is scarcely to expected that the MINING MARKET would be particularly active; and, in fact, it has been of late more than usually dull, and prices, especially where sales have been pressed, have given way; we look forward, however, very confidently to an improved state of things; and even within the last two days a great many enquiries have been made for shares in good mines, and symptoms of an active business have shown themselves, notwithstanding a decline in the standard.

South Frances, 155 to 160; at the meeting held on the 7th the accounts showed a profit of 415*l.* 5s. 9d. on the two months, but no dividend was declared. The balance carried over was 2508*l.* 6s. 3d. The report of the mine is very favourable. The ends have greatly improved, and the mine bids fair to pay well in the coming year. Alfred Consols, 3 to 3½; Brynford Hall, 30 to 32; Bryn Gwiog, 32½ to 35; Camborne Vean, 3⅞ to 4⅛; Crelake, 3 to 3¼; Cook's Kitchen, 18 to 20; Copper Hill, 95 to 100. Wendron Consols, 23 to 25; at the meeting on the 2d, the accounts showed a profit of 841*l.* 6s. 1d., and a dividend of 1*l.* per share (1024*l.*) was declared, leaving 626*l.* 17s. in hand. There are thirteen pitches at work, at an average tribute of 12s. 6d.; and twenty-one pitches, at an average tribute of 7s. 6d., at 60*l.* per ton for black tin. East Bassets have fluctuated, and leave off 112½ to 117½; East Caradon, 11¾ to 12; East Pool, 400 to 410. East Russell, 9⅞ to 10⅛, and flat. Merllyns, 25s. to 27s. 6d.; at the meeting, the accounts showed a balance of liabilities over assets of 129*l.* 1s. 10d., and about 4 tons of lead raised from the new lode, which still continues worth from 1 to 1½ ton of lead ore per fathom, and driving at 2*l.* 10s. The agent stated that should the lode continue as good as it is, he would be able to make good profits. East Grenville, 15s. to 17s.; Grambler and St. Aubyn, 23 to 25; Great Wheal Alfred, 14s. to 16s. Great Retallack have declined from 37s. 6d. buyers, to 32s., 34s., without any change in the mine. Bottle Hill, 25s. to 27s. 6d.; notwithstanding the frost, 2½ tons more of tin have been sold, the price being 76*l.* 12s. 6d. per ton. The last price, a fortnight ago, was 81*l.* 17s. 6d.; thus showing the fall in the price of black tin. Great South Tolgus, 7⅛ to 8⅛; Great Wheal Martha, 17s. 6d. to 20s.; Herodsfoot, 33s. to 35s.; Hingston Down, 33 to 33¾. Holmbush advanced to 3, but leave off 2½ to 2⅝; a great improvement has taken place in the mine. Lady Bertha, 28s. to 30s.; Marke Valley, 4 to 4¼. East Carn Brea have been largely dealt in, and leave off 7⅜ to 7⅝; the 40 west is worth 40*l.* per fm. New Seton, 45 to 47; New Treleigh, 50s. to 55s.; North Downs, 3¾ to 4; North Frances, 4½ to 5; North Minera, 20s. to 22s.; North Robert, 25s. to 27s. 6d.; North Roskear, 29 to 31; North Trelawny, 7s. 6d. to 10s.; North Treskerby, 31 to 33; Pendeen, 5¼ to 5½; Prospidnick, 6½ to 7; Providence Mines, 45 to 47. East Budnick and Mount shares, to which we alluded last week, have been, we understand, all taken up, and are now quoted at a prem., ¼ to ⅜. Active operations will be commenced next week, and the mine will soon be in fork. A good lode is expected, and shares may reach a high premium. A good feature in the allotment was, as we are informed, that upwards of 1000 shares were applied for by different parties in Cornwall and Devon, several of whom being well acquainted with the mine. Rosewarne and Herland, 3¼ to 3⅜: 3 tons 6 cwts. of silver have been sold—6 cwts., at 465*l.* 7s. 6d. per ton; 1 ton 1 cwt., at 27*l.* 8s. per ton; 19 cwts., at 77*l.* 10s. per ton; and 1 ton 1 cwt., at 27*l.* 8s. per ton. This was broken from the cross-course in the 30, and from, it is said, 2½ fathoms of ground. Rosewarne United, 25 to 27½; Sortridge Consols, 14s. to 16s.; South Caradon, 300 to 310; South Carn Brea, 3¼ to 3⅜; South Condurrow, 17s. 6d. to 20s.; South Tolgus, 57½ to 60; St. Ives Consols, 48 to 50; Stray Park, 43 to 45; Silver Vein, ⅜ to ½; Tamar Consols, 2¼ to 2½; Tincroft, 5⅞ to 6⅛; Tolcarne, 2¾ to 3; Tolvadden, 2¾ to 3; Trelyon Consols, 16 to 18; West Caradon, 77½ to 80; West Frances, 16 to 18; West Seton, 360 to 370; West Stray Park, 4 to 4¼; West Wendron, 12s. to 14s.; Wheal Basset, 112½ to 117½; Wheal Buller have declined to 125, 130; Wheal Clifford, 200 to 210; Wheal Crebor, 9s. to 10s.; Redmoor, 5s. to 6s.; Wheal Grenville, 2¾ to 3; Wheal Kitty (Lelant), 13 to 14; Wheal Ludcott, 3⅛ to 3⅜; Wheal Margaret, 51 to 53; Wheal Mary Ann, 20 to 21. Wheal Seton have been largely dealt in, and leave off 127½ to 132½. Wheal Trelawny, 17½ to 18¾; Wheal Uny, 4 to 4¼; Wheal Wrey, 22s. 6d. to 25s.; West Bryn Gwiog, 21 to 23.

In Mining Shares, on the Stock Exchange, transactions to a considerable extent have been effected during the week. The following prices were officially recorded in British Mining Shares:—East Wheal Russell, 10⅜, 10, 9⅞; Great Wheal Alfred, ⅞; East Basset, 117, 115; Great Wheal Vor, 1⅜; Herodsfoot, 34, 33½; Wheal Basset, 114, 115; Alfred Consols, 3⅜; Stray Park, 46½; East Caradon, 11½, 11⅜; Great South Tolgus, 8. 7½, 7⅜; Devon Great Consols, 412½, 415; Tincroft, 5⅛; Wheal Kitty, 13.

In Foreign and Colonial Mining Shares the prices were:—Great Northern Copper of South Australia, 1¼, 1⅛, 1¼, 1⅛, 1½; General, 21½; Lusitanian, 2½; United Mexican, 3⅛, 3⅛, 3, 2⅞, 3, 2⅞, 3⅛, 3; St. John del Rey, 26¼, 26⅜, 26½; Fortuna, 2¾, 2⅝; Mariquita, ½.

The general feeling of distrust engendered by the fluctuations in the price of money has caused a falling off in the number of transactions "outside" in Foreign and Colonial Mining shares, although, as might have been anticipated, it has not materially affected the price of shares. These classes of stock are not usually influenced to any great extent by the changes in the money market, unless there are despatches to hand causing a fluctuation in price, though they share, to a certain extent, in the present general depreciation. St. John del Rey shares are quoted 26 to 27, ex div., being 10s. below last week's quotations. Cobre, 43 to 45; the meeting is called for the 28th inst., when a satisfactory statement is anticipated. United Mexican shares have declined to 3, ⅜; at the coming meeting the directors intend to propose certain resolutions empowering an alteration in the Deed of Settlement. St. John's United meeting, on Monday, did not pass off very quietly, and ended in an adjournment. No decisive steps being come to, how far the directors are to blame for the present unpleasant state of affairs there does not appear to be sufficient data to warrant an opinion being formed; but if it should prove correct, as stated in some quarters, that they are in receipt of unfavourable reports from the mines, they, as servants of the company, are to blame in not having made those reports public. It is to be hoped that the adjourned meeting will enable everything to be placed on an equitable footing, such proceedings as those on Monday doing much to damage the company in public estimation. General shares, 22 to 22½; Great Northern rather quieter, at 1⅛ to 1¼; Kapunda, 2⅛ to 2¼; Worthing, ⅝ to 1; English and Australian, 2¾ to 3; Fortuna, 2⅝ to 2¾; Mariquita, ½; the meeting will be held at the end of the present month, at which, however, it can hardly be expected a favourable report from the directors can be presented, the recent advices from the mines not being very encouraging. Every confidence is, however, placed by the directors in the result of future operations.

At Redruth Ticketing, on Thursday, 2685 tons of ore were sold, realising 16,468*l.* 1s. The particulars of the sale were—Average standard, 130*l.* 11s; average produce, 6¾; average price per ton, 6*l.* 2s. 6d.; quantity of fine copper, 182 tons 14 cwts. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
Dec. 13	3434	£134 6	6⅝	£5 17 6	£91 10
„ 20	4770	134 9	6½	6 0 0	92 6
„ 27	2740	135 9	6¾	5 16 6	92 0
Jan. 3	2602	133 15	7⅛	6 19 0	95 17
„ 10	2685	130 11	6¾	6 2 6	90 3

Compared with the last week's sale, the decline has been in the standard 5*l.* 13s., and in the price per ton of ore about 7s. 10d. Compared with the corresponding sale of last month, the decline has been in the standard 1*l.* 13s., and in the price per ton of ore about 2s. 3d.

At the Swansea Ticketing, on Tuesday, 2102 tons of ore were sold, realising 31,346*l.* 11s. The particulars of the sale were—Average standard, 108*l.* 16s. 9d.; average produce, 15¾; average price per ton, 14*l.* 18s. 3d.; quantity of fine copper, 331 tons 1 cwt. The particulars of the sales during the past month have been:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore cop.
Dec. 11	2128	£108 3 0	14 18–16	£14 4 0	£95 9 0
„ 26	1330	107 13 6	16⅝	15 13 0	97 17 0
Jan. 8	2102	108 16 9	15¾	14 18 3	94 15 0

Compared with the last sale the standard has slightly declined. Of the 2102 tons sold on Tuesday, 734 tons were from British mines, which gave an average produce of 12, and sold at an average standard of 113*l.* 1s. 6d. =11*l.* 6s. 10d. per ton of ore; the remaining 1368 tons were foreign ores, which gave an average produce of 17¾, and sold at an average standard of 107*l.* 5s. 10d.=16*l.* 16s. 6d. per ton of ore. There will be no sale on January 29.

At Wendron Consols Mine meeting, on Jan. 2, the accounts for Aug., Sept., and Oct. showed—Balance last audit, 808*l.* 10s. 11d.; black tin, 527*l.* 3s.; carriage, 21*l.* 7s. 6103*l.* 0s. 11d.—Labour cost, 3164*l.* 7s. 5d.; merchants' bills, 986*l.* 18s. 11d.; lords' dues, 300*l.* 17s. 7d.: leaving to credit, 1650*l.* 17s. A dividend of 1024*l.* (1*l.* per share) was declared, carrying to next account 626*l.* 17s. Capts. J. Taylor, E. Jenkin, and W. Johns reported on the mine. They have thirteen pitches at an average tribute of 12s. 6d., and 21 pitches at an average tribute of 7s. 6d., at 60*l.* per ton for black tin. Total hands employed in the mine, 368 (including 64 girls).

At South Wheal Frances meeting, on Monday, the accounts showed—Balance last audit, 2093*l.* 0s. 6d.; ore sold, Oct., 1607*l.* 10s. 2d.; ditto, Nov., 1501*l.* 9s. 6d.; tin sold, 142*l.* 6s. 2d. = 5344*l.* 6s. 4d. — Mine cost, merchants' bills, and sundries, 2836*l.* 0s. 1d.: leaving credit balance, 2508*l.* 6s. 3d. The profit on the two months' workings was 415*l.* 5s. 9d. Capts. Pascoe, Prisk, and Bennett reported upon the various points of operation. There was no material change in the tribute department since the previous meeting.

At Vale of Towy Mine meeting, yesterday (Mr. J. Hopgood in the chair), the accounts for the three months ending October showed—Balance last audit, 817*l.* 17s.; lead ore sold, 1510*l.* 3s. 4d.; ore not sampled in consequence of the frost, estimated at 750*l.* =3108*l.* 0s. 4d.—Mine cost, 1497*l.* 18s. 10d.; merchants' bills, 548*l.* 11s. 6d.; sundries, 208*l.* 7s. 3d.: leaving credit balance, 853*l.* 13s. 9d. The report of the agents stated that the engine-shaft was about 2 fathoms below the 90 fm. level, where a plat had been cut, and all the necessary work done preparatory to sinking. The 90 south had been driven 15 fathoms. lode 5 feet wide, composed of barytes and stones of ore. He considered they were within 2 fathoms of where they had had the bunch of ore in the 80, and where a good run of ore might be expected. In the 80 fm. level, north of the engine-shaft, the lode was 4 feet wide, composed of barytes, carbonate of lime, and producing saving work. Field's shaft had been sunk 10 fathoms 3 feet under the 70 fathom level. The 70 fathom level had been driven 19 fathoms from the said shaft; lode 2 feet wide, composed of barytes and stones of lead. The 60 south had been opening good ground, and was being worked for 55s. per ton of lead ore. Nant's shaft had been sunk 9 fathoms 5 feet—all the way in good ore ground. The accounts having been passed and allowed, and the report received and adopted, the Chairman stated that at the last meeting they had been informed their secretary was about to resign, upon which occasion the committee were unprepared to recommend any person to fill the vacancy. Upon subsequent deliberation, the committee unanimously felt that it would be impolitic to remove the company from that office, when Mr. Field, sen., was kind enough to express his willingness to accept the office of secretary at the same salary as had been hitherto paid. The appointment led to a vacancy in the committee of management, which had been filled by the appointment of Mr. G. Harris, whose well-known business habits and acquaintance with accounts made him a valuable acquisition. The appointments having been confirmed, a vote of thanks to the Chairman terminated the proceedings.

At the Calvadnack Mine meeting, on Jan. 2, the accounts showed a debit balance of 498*l.* 18s. 7d. A call of 10s. per share was made. The number of men employed on tutwork and tribute are 105.

The Grambler and St. Aubyn meeting, convened for Nov. 9 last, was postponed till March 5. A report from the mine, dated Jan. 10, appears among the Mining Intelligence.

At the Devon New Copper Mine meeting, on Dec. 31, the directors' report stated that in cross-cutting through the great north lode at the 58 copper ore had been met with, rising to about 2½ ft. (not 23 ft., as stated last week) above the floor of the cross-cut.

At Silver Rake Mine meeting, on Wednesday (Mr. F. Combes in the chair), the accounts showed a credit balance of 455*l.* It was agreed that the company should be registered under the provisions of the Joint-Stock Companies Limited Liability Act. Details in another column.

At the West Condurrow Mine meeting on Jan. 3, the accounts showed a debtor balance of 2346*l.* 16s. 4d. A call of 1*l.* per share was made. The report showed that the mine is in a much more favourable position than it has ever before been; and now that a good engine is erected, the mine will be prosecuted with energy, and from present indications with success.

At West Bryn Gwiog Mine meeting, on Wednesday (Mr. F. Combes in the chair), the accounts showed a credit balance of 455*l.* The company was placed under the provisions of the Joint-Stock Companies Limited Liability Act, with an arrangement that the general meetings be held quarterly. Details in another column.

At Tretoil Mine meeting, on Tuesday (Mr. Onmaney in the chair), the committee were re-elected, and empowered to accept all shares in arrear of call, either in partial or full payment, or to make such other arrangement as they may deem expedient. The meeting was adjourned. Details appear in another column.

At West Wheal Jane meeting, on Wednesday, the accounts showed a balance of 201*l.* 10s. 11d, in favour of the mine. Messrs. Venables, Painter, Frost, Stow, Purssey, and Jones were appointed the committee of management. Messrs. Baker and Queich were elected auditors. Thanks were voted to Viscount Falmouth for his liberality in giving up the dues to the end of the past year.

At North Minera Mine meeting, on Thursday (Mr. T. P. Thomas in the chair), the accounts showed a balance of assets over liabilities of 536*l.*, in addition to which the company had 17s. 6d. per share to call up on 4000 shares. To meet the wish of the shareholders, it was arranged that the general meetings be held quarterly. Details appear in another column.

At North Downs and Wheal Rose United Mines meeting, held in Truro on Tuesday, the accounts showed a debit balance of 3122*l.* 3s. 2d., which was divided, and a call of 5s. per share made. It was resolved to stop the engine until Briggan was in a position to commence drawing their water; and a deputation was appointed to look out for a good 70-in. cylinder engine, to put upon the Wheal Rose part of the sett. The purser was instructed to commence immediate proceedings in the Stannaries Court against all those in arrear of calls.

At the Merllyn Mine meeting, on Jan. 8 (Mr. J. Y. Watson, F.G.S., in the chair), the accounts showed a balance of liabilities over assets of 129*l.* 1s. 10d. A call of 1s. per share was made. A letter from Mr. W. Frewer, jun., applying to have his 150 shares, forfeited Aug. 7 last, restored to him, was read, when it was proposed by Mr. F. R. Wilson, and seconded by Mr. H. B. Jones, that "under the circumstances detailed in Mr. Frewer's letter, the share be restored to him, on payment in a week of the calls due thereon, with interest at 5 per cent., and a fine of 10*l.*;" whereupon an amendment was proposed by Mr. C. Gibbon, and seconded by Mr. J. B. Wathen, that "Mr. Frewer's shares, upon general principles, be not restored, the same having been forfeited, and the forfeiture confirmed." The amendment having been put from the chair, there appeared two in favour of, and seven against; consequently the Chairman declared the amendment as lost, and the original resolution carried. Capt. W. Sandoe says—"We have a large pile of ore stuff on the surface, and shall commence dressing to prepare a small parcel of ore for sale as soon as the weather will permit. Altogether, our prospects are most cheering."

At Old Tolgus United Mines meeting, on Thursday (Mr. M. Pound in the chair), the accounts showed a debit balance of 1330*l.* 5s. 6d. A call of 2*l.* per share was made. Details in another column.

At the Garreg Mine meeting, on Jan. 8., the accounts showed a debit balance of 28*l.* 14s. 10d. A statement of liabilities and assets showed the former to amount to 162*l.* 4s. 5d. A call of 3s. per share was made. Capt. W. Sandoe considers that some present workings cannot fail in a short time to open out well, and prove remunerative to the company.

At the St. John's United Copper and Lead Mining Company, Newfoundland, meeting, on Monday (Mr. C. P. Berkeley in the chair), it was agreed that the meeting should be adjourned until Monday, to enable the directors to reply to the allegations made by one of the members of the committee of inspection which was appointed to investigate and report upon the company's affairs. Details elsewhere.

LEEDS, JAN. 10.—The Mining Share Market has been inactive; the amount of business done having been of an exceedingly limited character. Prices have suffered a slight depression. This may be partially attributed to the further advanced rates of discount by the Bank of England, and to the continued severe frost, which has caused a temporary stoppage of the machinery, and the suspension of dressing and surface operations at many of the mines. Craven Moor, 4s. 6d. to 5s. 6d.; Hebden Moor, 1 to 1¼; Merryfield, 3s. 6d. to 4s.; Wensleydale, 7s. to 8s.; Yorkshire, 15s. to 17s.; Niddersdale, par.

The WHARFEDALE MINING COMPANY (near Kettlewell, Yorkshire) are making favourable progress in the working of this mine, and continue to produce lead ore of good quality. They have lately had a smelting of 16⅛ tons of lead, which was sold last month for 19*l.* 10s. per ton, delivered at Skipton. The mine has nearly paid its own cost for the past two or three years, and gives promise of an early improvement, which we trust will reach the shareholders in the shape of good and speedy dividends.—JOHN GLEDHILL AND CO.

The new rules of the MINING EXCHANGE, as agreed to by the members, have just been printed, and appear well calculated to meet the requirements of the case. The qualifications and mode of electing the committee are briefly laid down, and ample provision is made for modifying the rules, and for determining disputes between members of the Mining Exchange and persons employing them as brokers. The expulsion and suspension of members for disgraceful or dishonorable conduct, or for violation of the rules; but the committee have power to dispense with the strict observance of any of the regulations when an absolute majority deem it requisite to do so. The rules for the admission and re-admission of members, and their clerks, are of the ordinary character; and amongst the general rules we find that members bind themselves not to proceed at law against a member, or his principal, without his consent, or the consent of the committee. The remaining rules relate to the delivery of transfers, and are, we think, such as must give general satisfaction. Indeed, the whole of the rules are based upon those which the Stock Exchange have laid down to meet similar cases, such modifications only having been made as seemed necessary in consideration of the different standing and extent of the respective institutions.

GOVERNMENT SCHOOL OF MINES—LECTURES FOR WORKING MEN.—The lecture, on Monday, by Robert Willis, M.A., was on Applied Mechanics. He observed that all machines, however complicated their structure, might be reducible to three parts. One to to which the power is applied, one which performs the result, and the third being the connecting link between those two. After treating on the first of these divisions, and showing how it should be arranged for the reception of the power, the lecturer went on to consider the third part, dwelling particularly on the use of endless bands in communicating motion from one piece of machinery to another, and in converting one kind of motion into others more completely. This portion of the subject was illustrated by working models. Reference was made to the great necessity of being well acquainted with the method of throwing off belts from pulleys while in motion, so as to modify the many accidents arising from people getting entangled in machinery.

NORTH STAFFORDSHIRE COAL AND IRONMASTERS' ASSOCIATION.—The quarterly meeting of the association was held at the Railway Hotel, Stoke-upon-Trent, and was numerously attended. Mr. Heath was appointed Chairman of the association for the ensuing year, and Mr. Heathcote and Mr. Bourne were elected to represent this district at the meetings of the Mining Association of Great Britain. The coal trade of the district was reported brisk, but the report of the iron trade in all its branches was unfavourable, with no prospect of immediate improvement. The desirability of altering the special rules now in force throughout the district under the Coal Mines Inspection Act was discussed, and a resolution was passed that the meeting did not consider it necessary to alter the special rules, further than adding thereto the rule as required by the Mines Inspection Act of last session, appointing an office at each colliery for the payment of wages. The subject of the proceedings by the North Staffordshire Railway Company against Mr. Bull, for an alleged fraud committed by him in declaring hoops as undamageable iron, was brought under the notice of the meeting, and it was resolved that in the opinion of the meeting Mr. Bull was perfectly justified, according to the custom of the trade, in declaring the iron as undamageable, he being willing to incur the ordinary risk of carriage, and they firmly believe that Mr. Bull had no intention of committing, nor was guilty of either a legal or moral fraud upon the company, and they cannot but express extreme regret that the company should have thought fit to proceed against him for penalties in a vindictive spirit.

PREVENTING INCRUSTATION OF STEAM-BOILERS.—The prevention of the calcareous and similar deposits in steam-boilers is a subject of such importance to all employing steam-power, that we are induced to add to the notice of Messrs. Easton and Springfield's patent boiler-fluid, published in the *Mining Journal* of Dec. 22, a brief statement of the details of the invention. The inventors do not pretend that their composition is equally efficient under all circumstances, as it is sometimes requisite, owing to the chemical ingredients contained in the water, to vary it. They have, however, proved by practical experience that their invention is eminently applicable to boilers using either Thames water or sea water; the compound consists of white arsenic and soda, mixed together in equal parts by weight in a copper or other convenient vessel, with a small quantity of water, and keeping the same boiling slowly until the arsenic is dissolved; this being cooled down gradually, the liquid is ready for use. The compound may be applied as a liquid, or in a pasty state like paint. If the boiler be already encrusted, the compound speedily removes the incrustation, and if applied to new boilers, the deposit formed can be removed by the ordinary blow-off action, as it will consist merely of loose granules. The unquestionable testimony as to the efficacy of the compound, places its value beyond doubt, and now that it is being fairly introduced to the public, its adoption will probably become general.

THE TELEGRAPH MANUAL.—Under this title, one of the most elaborate and interesting volumes upon the subject of Telegraphy which it has fallen to our lot to peruse, was published some short time since by Mr. Taliaferro P. Shaffner, of Kentucky, and as the proposition about to be developed by the North Atlantic Telegraph Company will doubtless cause renewed attention to be turned to the science of Telegraphy, we intend in our next Journal to avail ourselves of some little of the information brought together by Mr. Shaffner, to give our readers an insight to the history of the means employed for communicating between distant places from the earliest period at which it was adopted to the present time. We trust that the time is not far distant when we shall be placed in instantaneous communication with the inhabitants of the New World, and considering the continually increasing intercourse between the peoples upon the opposite sides of the Atlantic, and the additional knowledge which has been acquired since the unsuccessful attempt to lay the long-sea cable, we opine that the shareholders in a North Atlantic Telegraph Company will be amply rewarded for their enterprise in establishing the wished-for link between this country and the United States, and that the difficulties to be surmounted will be of a comparatively unimportant character.

The ROYAL INSURANCE COMPANY, which is already well known to the public, both from the great prosperity that has attented its operations from the earliest period of its existence, and from the valuable actuarial works which have been published by its manager, Mr. Percy Dove, has issued an extremely useful little volume in the form of an almanac and year book for the present year. The principal object of the book is to demonstrate to those consulting it that, owing to the data upon which the tables of premiums have been compiled being correct, there is an absolute guarantee that the company will at all times be in a position to meet the claims that may come in; and we have no hesitation in declaring that this object has been attained to an extent which could scarcely have been hoped for. The volume is printed in colours in a very superior manner, and contains a vast amount of really valuable information, comprising the Almanac and Diary for the year; an elaborate treatise upon the principles upon which the business of insurance is conducted; and a list of Her Majesty's Ministers, and the members of the House of Commons. In an appendix is given a chronicle of events connected with the war in Italy during 1859, including an introductory epitome of the war of 1848-9, and accompanied by some interesting episodes of the war.

ANNUAL REVIEW OF MINING.—Now ready, price 1s., the "Progress of Mining in 1860," by J. Y. Watson, F.G.S., being the 17th Annual Review. To be had at the *Mining Journal* office, 26, Fleet-street; or of Messrs. Watson and Cuell, St. Michael's-alley, Cornhill.

LEAD ORES.

Mines.	Tons.	Price per ton.	Purchasers.
Sold on the 4th January.			
Exmouth	80	£11 0 6	Walker, Parker, & Co.
Frank Mills	115	15 1 6	ditto
ditto	55	10 11 6	Sims, Willyams, & Co.
Yarner	70	3 12 0	ditto
Sold on the 7th January.			
Keswick	20	13 10 0	Shield & Dinning.
East Logylas	110	14 15 6	Walker, Parker, & Co.
Cwmystwith	60	14 3 0	Sims, Willyams, & Co.
ditto	60	13 15 6	ditto
Sold on the 10th January.			
Maesyrerwddu	56	14 16 6	Walker, Parker, & Co.
Coetia Llys	13	14 16 0	ditto
Deep Level	5	13 6 0	Newton, Keates, & Co.
Brynford Hall	11	14 5 6	ditto
Herward United	5½	12 15 0	ditto
ditto	5½	12 15 0	A. Eyton.
Rhosesmor	50	14 8 0	ditto
Parys	24	14 0 6	Walker, Parker, & Co.
Dyfngwm	42	13 18 0	A. Eyton.
ditto	15	14 1 6	Walker, Parker, & Co.
Rhoswydol	34	13 19 6	ditto
Dyliffe	45	14 4 0	Newton, Keates, & Co.
Llancrchyraur	41	14 12 6	ditto
Catherine & Jane Consols	8	13 13 0	Walker, Parker, & Co.

BLACK TIN.

Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Sold on the 28th December.				
Gonamena	0 35 1 16	£80 0 0	£ 141 11 5	—
Sold on the 2d January.				
Penhalls	4 9 1 11	76 2 6	340 1 7	Bissoe Co.
Kitty (St. Agnes)	6 6 2 7	75 5 0	476 3 9	ditto
Sold on the 4th January.				
St. Dennis Cons.	2 17 0 22	—	210 14 8	Enthoven & Sons.
Tretoil	2 7 2 0	75 0 0	178 2 6	New Blowing.
Sold on the 8th January.				
Redmoor	4 0 0 0	77 15 0	311 0 0	—

COPPER ORES.

Sampled December 19, and sold at Swansea January 8.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Cobre	99	13¾	£12 13 0	Ookip	48	35	£33 9 0
ditto	80	13½	12 9 0	ditto	46	35¾	32 13 0
ditto	77	12¾	12 12 0	ditto	35	35½	32 17 0
ditto	88	14	12 18 0	Wh. Maria	40	21	20 3 0
ditto	87	13¾	12 12 0	ditto	39	21	19 10 6
ditto	48	14	12 19 0	Springbok	68	23	21 5 6
ditto	51	21¼	19 15 0	Berehaven	108	11¾	11 7 0
ditto	47	21¼	18 14 0	ditto	74	10¾	9 3 0
ditto	10	61½	59 2 0	Laxey	126	6¾	6 5 6
ditto	93	14	12 13 6	British Regul.	56	18⅝	16 10 0
ditto	92	14¼	12 16 0	ditto	48	18¼	16 1 6
ditto	64	14¼	12 16 0	Spanish	8	18⅜	15 3 0
ditto	100	14¼	12 16 0	ditto	5	6	5 5 6
ditto	60	23	21 1 6	ditto	3	15	14 1 0
ditto	58	22¾	20 19 0	ditto	3	15½	13 11 0
Knockmahon	100	12⅝	11 17 6	Rotterdam Sl.	19	3	1 18 0
ditto	98	12⅞	12 2 6	Holyford	5	13⅜	12 5 0
ditto	111	11	10 7 6	Glo'ster Slag	8	—	43 7 6

TOTAL PRODUCE.

Cobre	1054	£15483	17 6	Laxey	126	£ 790	13 0
Knockmahon	309	3527	7 6	British Regulus	104	1695	12 0
Ookip	129	4257	5 0	Spanish	19	230	7 6
Wheal Maria	79	1567	9 6	Rotterdam Slag	19	36	2 0
Springbok	68	1446	14 0	Holyford	5	61	5 0
Berehaven	182	1902	18 0	Glo'ster Slag	8	347	0 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Copper Miners' Company	5	£ 61 5 0
Freeman and Co.	94	1290 4 6
F. Grenfell and Sons	446	5162 12 6
Sims, Willyams, Nevill, and Co.	383	4480 9 0
Vivian and Sons	232	4423 16 0
Williams, Foster, and Co.	488	8114 2 0
Mines Royal Company	124	1682 18 6
Mason and Elkington	128	2711 4 0
F. Bankart	56	1118 12 0
Sweetland, Tuttle, and Co.	146	2301 7 6
Total	2102	£31,346 11 0

NO SALE on Tuesday, January 29.

AVERAGES.

	Produce.	Price.	Standard.
British	12	£11 6 10	£113 1 6
Foreign	17¾	16 16 6	107 5 10
Sale	15¾	£14 18 3	£108 16 9

Totals—British, 734; Foreign, 1368=2102 tons (21 cwts.)

AVERAGES OF LAST SALE.

	Produce.	Price.	Standard.
British	12⅞	£12 3 0	£112 11 0
Foreign	18 15–16	17 14 0	105 15 0
Sale	16⅝	£15 13 0	£107 13 6

Totals—British, 490; Foreign, 840=1330 tons (21 cwts.)

COPPER ORES.

Sampled Dec. 26, and sold at Tabb's Hotel, Red th, Jan. 10.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
West Basset	83	£4 8 0	West Alfred Consols	20	£7 2 0
ditto	75	6 14 6	ditto	11	1 17 0
ditto	61	7 3 0	Wheal Margery	58	2 14 0
ditto	60	6 15 6	ditto	41	3 15 0
ditto	58	5 1 6	ditto	40	9 12 6
ditto	53	10 15 0	ditto	7	10 11 6
ditto	49	7 6 6	Great South Tolgus	73	6 9 6
ditto	41	12 10 6	ditto	39	15 5 6
ditto	23	5 1 6	ditto	34	3 7 6
ditto	22	4 8 6	Wheal Buller	57	2 10 6
Tolvadden	63	4 17 0	ditto	46	3 7 0
ditto	57	3 9 6	ditto	20	9 15 6
ditto	53	5 3 6	Copper Hill	60	3 1 0
ditto	50	6 8 0	ditto	32	8 8 6
ditto	44	3 5 6	ditto	24	10 12 0
ditto	38	3 7 6	East Rosewarne	43	6 19 6
Par Consols	76	8 16 6	ditto	40	11 0 6
ditto	75	8 3 6	ditto	22	12 5 0
ditto	66	11 8 6	ditto	10	3 10 0
ditto	35	4 18 0	Botallack	45	10 11 0
Alfred Consols	55	3 13 6	ditto	35	10 19 6
ditto	53	1 9 6	ditto	30	7 14 6
ditto	45	9 12 6	Wheal Anna	48	5 15 0
ditto	41	6 11 6	ditto	34	3 10 0
ditto	15	5 6 6	North Basset	50	4 5 6
Herland	2	1 15 6	ditto	20	3 3 6
Great Wheal Alfred	66	4 3 6	South Crenver	27	3 0 6
ditto	44	3 11 0	ditto	19	5 14 0
ditto	22	5 0 6	ditto	2	13 11 0
ditto	16	5 10 6	Wheal Agar	33	5 2 6
ditto	15	2 14 6	ditto	7	1 10 6
West Alfred Consols	62	2 2 6	New Wheal Hender	39	9 2 6
ditto	43	3 10 0	Clijah and Wentworth	18	4 15 6
ditto	26	5 18 6	ditto	14	6 9 0

TOTAL PRODUCE.

West Basset	525	£3662	17 0	Copper Hill	116	£ 707	0 0
Tolvadden	305	1370	5 0	East Rosewarne	115	1045	8 6
Par Consols	252	2209	7 6	Botallack	110	1090	12 6
Alfred Consols, &c.	211	1066	8 6	Wheal Anna	82	395	0 0
Great Wheal Alfred	163	671	11 6	North Basset	70	277	5 0
West Alfred Con.	162	598	13 0	South Crenver	48	217	1 6
Wheal Margery	146	769	7 6	Wheal Agar	40	179	16 0
Great South Tolgus	146	1183	3 0	New Wheal Hender	39	355	17 6
Wheal Buller	123	492	2 0	Clijah & Went	32	176	5 0

Average Standard ..... £130 11 0 | Average Produce 6¾

Average Price per ton £6 2 6

Quantity of Ore ..... 2685 tons | Quantity of Fine Copper, 182 tons 14 cwts

Amount of Money £16,468 1 0

LAST SALE.—Average Standard ..... £133 15 0.—Average Produce 7¼

Standard of corresponding sale last month, £134 6 0.—Produce, 6¾.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal Company	56	£ 225 6 0
Freeman and Co.	219	930 1 9
Grenfell and Sons	46	523 18 6
Crown Copper Company	36½	236 6 9
Sims, Willyams, and Co.	356	2286 14 9
Williams, Foster, and Co.	425½	3454 14 3
Mason and Elkington	486½	3292 19 3
F. Bankart	201	897 0 6
Copper Miners' Company	201	1488 13 0
C. Lambert	116	341 16 0
Newton, Keates, and Co.	151	1098 8 0
Sweetland and Co.	390½	1692 2 9
Total	2685	£16,468 1 0

Copper ores for sale on Thursday next, at the Royal Hotel, Truro.—Mines and Parcels.—Devon Great Consols 2006—Phœnix Mines 362—Hingston Down 335—West Caradon 320—Marke Valley 260—Holmbush 203—Bedford United 200—Lady Bertha 200—East Russell 200—Okel Tor 160—Wheal Friendship 137—Wheal Emma 129—Kelly Bray 120—East Caradon 120—South Bedford 110—Collacombe 105—Wheal Franco 68—Hawkmoor 55—Trehill 50—Gawton 38—Devon and Courtenay 30—Wheal Arthur 20—Sigford Consols 20.—Total, 5248 tons.

Copper ores for sales on Thursday week, at Tabb's Hotel, Redruth.—Mines and parcels.—South Caradon 415—Great Wheal Buay 326—United Mines 280—St. Day United 253—North Downs 175—Tywarnhayle 172—Craddock Moor 145—North Treskerby 140—Wheal Polmear 130—South Crinnis 120—Wheal Ellen 77—Gonamena 53—Perran Mines 41—Total, 2327 tons.

SECOND SALE IN JANUARY.

Years.	Tons.	Prod.	Amount.	Standard.	Ore copper.	Cake cop.
1851	2613	9¼	£16,527 11 6	£ 95 4 0	£86 8 0	£84 0
1852	2839	8¾	16,694 9 0	103 6 0	70 8 0	88 10
1853	3411	7½	29,753 15 0	132 6 0	115 16 0	107 10
1854	4156	6½	28,116 11 6	146 19 0	104 9 0	126 0
1855	3584	6¼	20,749 11 0	137 2 0	92 19 0	126 0
1856	5336	5⅞	28,701 4 0	144 0 0	95 5 0	126 0
1857	5084	6	35,204 9 6	159 17 0	114 8 0	126 0
1858	4018	6¾	22,35 2 0	130 13 0	87 11 0	107 10
1859	3492	6½	18,977 5 6	126 8 0	83 10 0	107 10
1860	3721	6¾	26,626 13 0	145 10 0	105 2 0	117 0

The copper in the ore expresses the nett price per ton of copper paid to the miner.

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It only requires to be known to become a favourite with practical miners generally.—*Mining Journal*, May 7, 1859.

It is calculated to be of great use to the mine agent and the teacher in mining districts.—*Herapath's Journal*, May 7, 1859.

We hail the book as a great boon to all engaged in mining operations, and as a large stride in popularising this hitherto rather abstruse study.—*Plymouth and Devonport Journal*, July 21, 1859.

"Few agents know to use a theodolite, never having learned; to them, I recommend the study of Mr. Rickard's *Miners' Manual*.—R. S.:" Correspondence in *Mining Journal*, Feb. 25, 1860.

"If your correspondent, 'S. A. M.,' will read the *Miners' Manual* carefully, he will find all the information he asks.—MINER:" Notices to Correspondents, *Mining Journal*, Feb. 25, 1860.

Such a work for a few shillings in our youthful days would have been hailed by us as a valuable prize.—*Mining Journal*, Dec. 1, 1860 (second notice).

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Notices to Correspondents.

*** Much inconvenience having arisen, in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

WOLFRAM.—In the Journal of Dec. 22 I see an enquiry, by "K.," for tungstate of soda from wolfram, and the products made from that ore under my patent. I shall be happy to communicate with him on those subjects.—F. W. EMERSON: *Fenchurch-st.*

YORKSHIRE AND DEVONSHIRE MINING.—Being a shareholder in Yorkshire lead mines, and also in the Lady Bertha, in Devonshire, my attention has been directed immediately to the respective and relative conditions of the ore-producing ground in these districts especially, and ultimately to their pecuniary results, and my conclusions have been drawn from practical data. Mining agency has, in addition, afforded me assistance. I find that the Lady Bertha Company are working ground, according to their own admission, worth from 15*l.* to 20*l.* per fathom, and yet paying no dividends, while some of the Yorkshire lead mines, with really no natural advantages, can pay dividends on comparatively very inferior producing ground. May we not fairly enquire what it is that swallows up this yield of metal? There would appear to be something requiring explanation from the officials.—W.

COLLIERY EXPLOSIONS—AIR-PUMPING APPARATUS.—The letter of "M. B. G." (Durham) shall appear next week.

QUEEN OF TAMAR.—I find in the extracts which appeared in the Notabilia of last week's Journal some allusions made to the management of this mine, under the name of "A Shareholder." If the writer, whom we know well, had any knowledge of mining, there might be some excuse for his assertions; but the gentleman whom he quotes in that paragraph, nor himself, have ever been underground at the mine since the engine-shaft was commenced, and then only at adit level, some twelve months since, and, therefore, I think cannot be capable of judging of the correctness of the working. If the writer could suggest a more inexpensive mode of working, and ensure some good courses of ore, I certainly should like to get his opinion, for the sake of the other shareholders; but I almost fear his writing to the Journal arose from annoyance at not having obtained the purserhip. He also makes some allusions to the secretary; to this I shall make no remark, as I believe he will answer for himself, but merely state no gentleman can express more anxiety for the welfare of the shareholders, and be more economical in the expenditure of their money.—C. WILLIAMS: *Beeralston.*

GREAT WHEAL MARTHA.—The annual general meeting of this company has at length been held, the proceedings passing off as I anticipated would have been the case, from the supineness generally displayed by the shareholders. There has been some discussion through the Journal, not so much as to the prospects of the mine as to the capability of its being properly developed with the capital authorised by the present Articles of Association. This question will shortly be set at rest, for the 2s. 6d. call made by the directors since the meeting makes the shares fully paid; and, therefore, when the amount realised thereby is exhausted, unless discoveries are made in the levels extended to that time, yielding sufficient to carry the mine on to a profit, further capital must be raised, or the mine stopped. But, Sir, if these discoveries are the directors' only hope, I have no hesitation in saying they are doomed to disappointment. I am as fully aware as themselves of the different important improvements that have taken place in the bottom level during the past few weeks, but why is not the plunger fixed, to enable the sinking of the shaft to another level, and thus prove the value of these discoveries? And why, I will ask, has not the crusher been moved from its present position on another company's mine, from whom it was purchased some months since, and, as I am informed, paid for? If this were fixed in its proper position—and, by the bye, it can be worked either by the engine or water-power, there being plenty of the latter for such a purpose—the company would realise at least 1*l.* per ton more for the ores than at present. If the directors were not aware of these points, I consider the agent ought to have drawn their attention to them, and pressed the necessity of their being carried out at once; but, on the other hand, if these facts have come to their knowledge it will not impress anyone with a very exalted idea of their business talents—or, at all events, their fitness for the management of a mine, a post that requires considerable business tact and exercise of economy in every particular. If, as I am almost inclined to think must prove the case, further capital has to be raised, the present shareholders will reap a reward in seeing others step over their heads in obtaining a return.—N,

COLLIERY VENTILATION—THE FAN-BLAST.—Allow me, through your valuable Journal, to say I think Mr. Nasmyth did not go far enough in referring to the ventilation of the Earl Fitzwilliam's coal mines. He should have said,—"Not a life had been lost for years, since the introduction of those fans." And I should further call the attention of many of our great owners of coal mines to examine the valuable pump upon the same estate, for drawing the water out of the pits. If I am not misinformed, such an apparatus is much required both in Nottinghamshire and Derbyshire at the present day. The patent for the pump is by Mr. Henry Hartop, who is also the inventor of the fans for the ventilation of the mines.—A LOOKER-ON.

COLLIERY WORKINGS.—If "A Subscriber" had named the colliery he wished an opinion upon he would soon have had it, but when there is so much beating about the bush one hardly likes to say anything. If "A Subscriber" means Broncoed, near this town, the tale might soon be told. The present unsatisfactory state of this property is considered to be mainly owing to defective management. A short time ago they seemed to be going in the right direction, and a clever man was sent here as manager, but that, it appears, did not suit some of the parties concerned. Let "A Subscriber" and his brother shareholders meet, look into the qualifications of their directors, their viewer, and other officials, and obtain good active management; then all will soon be well again.—CYMRO: *Mold, Jan. 9.*

THE GAS ENGINEERING AND GENERAL IRONWORKS COMPANY.—Can any of your readers furnish information with respect to this project? The offices were at No. 11, Pancras-lane, E.C., but the answer there is, "Gone away, and left no address."—G. T.

JAMAICA, CLARENDON, ELLERSLIE, SUE RIVER, AND WHEAL JAMAICA MINING COMPANIES.—I am desirous of information as to the results of mining by the above companies in the Island of Jamaica. Some person qualified to do it will oblige by giving in the next Journal answers to the following queries:—What is the amount of money expended? What the amount of money realised from sale of ores, and what the present prospects, taking the mines respectively?—INQUIRER.

QUEEN OF TAMAR.—The question of incompetency in the management of this mine is easily solved. The directors have their reasons for appointing Capt. Williams in preference to Capt. Phillips, which can be fully explained at the next meeting of proprietors.—D.

WHEAL KITTY (Lelant).—I think there is an error as to the loss in working this mine for the last three months. On reference to the accounts, it will be seen that the loss was 16*l.* 15s. 4d., and not the sum, as stated, of upwards of 500*l.* I am sure that this result is very disappointing to all shareholders, especially when credit is taken for the sale of nearly 30 tons of tin, at 84*l.* per ton; and I, consequently, wrote for some explanation, but have not yet been replied to.—A SHAREHOLDER.

The letter from "A Pitman" reached us too late for this week's Journal: it shall appear in our next, together with several other matters, now necessarily omitted.

*** We shall next week give a SUPPLEMENTAL SHEET, to enable us to publish the concluding portion of Mr. Watson's ANNUAL REVIEW OF MINING, and several other matters now omitted—including the letter of our Cornish Correspondent; the remarks of Mr. James Crofts; Mining in Mexico; Mines and Minerals of America; New System of Ventilating Collieries, &c.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, JANUARY 11, 1861.

The new Act for the REGULATION AND INSPECTION OF MINES has been in force little more than a week, yet already difficulties have arisen in Lanarkshire and Ayrshire, in consequence of the resistance offered by the masters to the "weighing" and "wages" clauses, both of which were framed upon the most equitable principles, and with every endeavour to meet the wishes both of the employer and of the employed. The intention of the "weighing clause" was to ensure the men being paid for the full quantity of coal gotten by them, and the intention of the "wages clause" was to prevent the workman from being compelled, as it were, to expend a portion of his wages in intoxicating drinks. To carry out these intentions the provisions are ample; but if either party attempt to prove the intention of the clauses to be more or less than this, we opine that such attempts will be futile.

With respect to the "weighing clause," we do not think any material difficulty will arise, as it is so evidently just that the man should receive payment for the whole quantity of coal he "gets" that few masters would object to it, more especially as it is specially provided by the Act of Parliament that apparatus and facilities for weighing shall be provided. Indeed, with the exception of the rumour that the coalowners of Lanarkshire and Ayrshire refuse to comply with the clause—a rumour which should be received with the greatest caution—we have no evidence that any objections to its provisions have been raised since its enactment became an accomplished fact. The complaints of the workmen, whilst the previous Acts were in force, that they were defrauded of their just rights by their employers, were loud and frequent, and as the employers as strongly denied the imputation, the only light in which the clause can reasonably be regarded is, that it will afford an effectual answer to the men, and enable the masters to prove that the imputations against them were groundless.

As to the "wages clause," the position of affairs appears to be far less satisfactory, since the masters seem to consider that the clause can be easily and completely evaded, whilst the men assume that it gives them powers which it does not give, and which it was, in our opinion, never intended to give them. The clause, which is the 28th, reads thus:—

> The wages of each and every person employed in any coal mine, colliery, or ironstone mine, shall be paid to him or his representative, authorised or deputed to that effect, by his immediate employer, in money at an office to be appointed for that purpose in the special rules for such mine or colliery, and such office shall not be contiguous to any house where spirits, wine, beer, or other spirituous liquors are sold; and every owner or agent, or such employer who shall pay, or permit any wages to be paid, contrary to the provisions of this Act, shall for every such offence be liable to a penalty not exceeding 10*l.*

Now, from the reports of the Northern Coal Trade Association, and of the Mining Association of Great Britain, it is apparent that the thought of evading the clause is not unheard of amongst the masters; the Coal Trade Report stating that as the clause "provides that wages shall be paid to each person employed, or to his authorised representative, the form of authority will, therefore, be required where wages are received by one workman for a set of workmen, the signatures of such workmen being attached to the same. A short form of authority will be prepared by the committee, and issued to the trade;" and the Mining Association report declaring that "Masters are prohibited from paying their workmen in any office contiguous to any house where spirits, wine, beer, or other spirituous liquors are sold, while as far as this Act extends, they may with impunity pay them in the public-house itself." We think that with respect to the fallacy of the argument that an Act which forbids the payment of wages in any office contiguous to a place permits the payment of such wages in the place itself, two opinions can scarcely exist; and, as to the proposed general form, we believe that no form could be framed as would enable this systematic evasion of the evident intention of the Act. This opinion, moreover, seems to be confirmed by the provisions of the other Acts (and more especially of the 5th and 6th Vict., c. 99, sec. 10), which have to be construed with the Act in question.* The clause provides that the wages of each and every person employed shall be paid to him by his immediate employer, at the office named; and the employer who *permits* wages to be paid contrary to this provision is liable to a penalty 10*l.*; and surely if the master compel the use of a form so that one man may receive the pay of several, such receiver becomes the agent of the master, and, unless the wages of each and every workman be paid by the said receiver, at the appointed office, the liability to penalty will not be removed.

But whilst we contend that the masters cannot render the clause inoperative by the step they propose to take, we have no hesitation in maintaining that the men are not justified in supposing that such powers are given them as have been claimed by the miners of Lanarkshire and Ayrshire—the power to compel the employers to pay the full amount, and without the ordinary and customary deductions for fuel, medicine, school-fees, &c.; since in making those deductions the employer has the expressed authority of the 23d and 24th sections of the Truck Act (1 and 2 W. 4, c. 37), which is certainly of a character that entitles it to be consulted to ensure the correct interpretation of the 28th clause of the Mines Regulation and Inspection Act. The men will do well to content themselves with the many privileges the Act gives them, instead of endeavouring to raise an ill-feeling between themselves and their employers, which can only result in disadvantage to themselves. The deductions permitted by the sections of the Truck Act named cannot fairly be objected to on the part of the men, and we opine that an attempt on their part to prove that the single clause of the new Act over-rides those very salutary provisions would have the effect of inducing the independent members of the Houses of Parliament, and the public generally, to withdraw from the working colliers that large amount of sympathy and support which has hitherto been so freely accorded to them.

Upon the subject of the new Act, both employers and employed seem willing to admit that there are few of its provisions really open to complaint; and, as it is probable that it would be extremely difficult for either party to obtain a bill better suited to their views, it would be well for each to consider whether, so far as they themselves are concerned, it would not be better to permit the matter to remain as it stands.

* The various provisions of these Acts are fully discussed in TAPPING'S "Expositions of the Statutes relating to Ore Mines, Collieries, and Ironstone Mines," published at the *Mining Journal* office, price 6s.

The association of the Island of Sicily with some of the most important historic events of ancient Greece and Rome have ensured for it a knowledge and a regard above that bestowed upon other islands at least equal to, if not surpassing it in stupendous natural phenomena. The classic studies of our youth agreeably acquaint us with its sunny clime, its Scylla, its Charybdis, and its fabled heroes—pleasant learning enough, but no sooner acquired than supplanted by the more cosmopolitan information derived from a study of its mineral wealth. In our maturer years the ancient struggles of Sicily for freedom are recollected as a grandmother's tale, whilst its present rebellion against an illiberal dynasty is watched with absorbing interest. In fact, everything concerning the present state of Sicily finds a wonderful sympathy with every commercial people, because that island has, fortunately for itself, been for ages the chief source from which Europe has been supplied with SULPHUR. It cannot be denied but that Sicily, by its amazing production of sulphur, has greatly advanced the arts, and consequently the civilisation of the world. With us, Sicily and sulphur are synonymes.

But there is another island almost unknown, because unconnected with the traditions of classic history. It is situate far beyond the *ultima thule* of ancient travellers, and is known to moderns by the name of Iceland. This island, though snow-clad and ice-girt, yet surpasses Sicily in its cheap production of sulphur. In fact, it will shortly be world-famed for the productiveness of its sulphur districts, and the large and profitable yield of its sulphur banks. HENDERSON, about 50 years ago, observed that pure and refined sulphur had been largely exported thence for many centuries, and that when that accurate traveller visited the island there existed a quantity of that mineral sufficient to excite and reward mercantile speculation.

HENDERSON'S observations have been fully corroborated by the recent traveller, Commander CHARLES S. FORBES, who, in his late works, states that the sulphur of the sulphur banks and mines of Iceland is well worthy the consideration of commercial men, the quantity, pure quality, and cheapness of which being unparalleled, and that Iceland, in the event of an European war must necessarily be the magazine upon which we may rely for a constant and cheap supply of that mineral. The position of Iceland is especially favourable for our markets, and it is, perhaps, a subject for congratulation that most, if not all, the mines of the island are in the hands of an English capitalist. For a long time the tenacity with which the Icelandic peasant-owners clung to the titles of the sulphur districts prevented the application of any capital to their cultivation. But now it would appear that improvements in the access to the mines are being made, and that, judging by the very trifling cost of production, the constant and unlimited supply, the great purity of the mineral—it having undergone a kind of natural sublimation—and the moderate freight hither in the numerous vessels coming from England with salt returning in ballast, it is confidently assumed that the sulphur gathered from these sources will shortly undersell the Sicilian and Spanish sulphurs by almost one-half. This is pleasing intelligence to convey to all interested in the cheap production of sulphur, for which we are indebted to the valuable labours of Capt. FORBES, corroborating the facts recorded by HENDERSON.

The extremely wet and stormy weather which has prevailed for so lengthened a period, in the West of England more particularly, is, as we noticed in last week's Journal, telling seriously against many deep and heavily-watered mines, and disastrously in cases where old mines have been resumed by recently-formed companies. The at all times difficult and uncertain task of forking these to the bottom has of late been greatly enhanced from the above cause, and should plead as an excuse and palliative to adventurers and mine proprietors, who are often (sometimes but too justly, it must be admitted) inclined to blame promoters and agents who do not rigidly conform to their promises, or perform certain works as per estimates. No human foresight could have predicted, or even supposed, that the heavy rains would have continued with such unprecedented severity with scarcely an interval of intermission. Two consecutive days without snow or rain is so rare an occurrence, that hope is from these slender data engendered that a change is at length at hand. This was the case during the last week, but on Sunday the idea was dispelled—snow, sleet, and rain came on as heretofore, and seem as likely as ever to continue. We daily receive complaints of adits falling in, of breakages, lifts lost, and serious disappointments in being able to combat the tremendous influx of water, whereby the lower levels of many mines have been inundated, notwithstanding the most untiring and energetic efforts of the most skilful managers and subordinates, whose chagrin and vexation at not being able to fulfil their promises have been excessive.

We could name a large number of instances where most deserving men and prosperous properties are labouring under such adversities, but for obvious reasons must decline doing so. A perusal of the reports for some weeks will show a large catalogue, and the returns from several mines will be a sad evidence of the reality. But these causes from the laws of Nature are but temporary hinderances; a little patience and all will be well.

We make these remarks out of sheer justice to mining agents and managers: we repeat that we are fain to believe adventurers are frequently over sanguine, and too prone to expect literal and unqualified fulfilment of promises. We do not defend or in any wise palliate delays or extravagant representations; but we hope, under existing circumstances, proprietors will forbear to condemn either an excess of expenditure of money or time, more especially in many of the gigantic undertakings ushered into existence during the last year or two. If trouble be encountered in old established mines in full working, under most careful and experienced daily supervision, what can be expected in such cases as those we have referred to? The hindrances will soon be dispelled, and can in no way intefere with the intrinsic value or merits of the speculations themselves as such.

We trust these remarks may be read and accepted in a right spirit, and be the means of allaying any disappointment and regrets, but too frequently arising from misconstruction or non-application of untoward events, as, in these cases, far beyond human ken or control.

[FROM A CORRESPONDENT.]

There is a growing suspicion in the public mind that our steam fleet is most defective in all that constitutes a valuable armament for offence or defence. Steel shields for our "wooden walls" are not likely to remove this impression. As an experiment, the idea may be worth a trial; but there must be something radically wrong in the principle of construction of iron or wooden vessels which requires a superstructure possessing greater power of resistance than the body to be shielded. Our notions of the combination of parts, tenacity of materials, capacity, buoyancy, and minor matters of adaptation in shipbuilding are wholly at variance with the ideas current in the Government dockyards. A war arm to be effective must resemble in its material as much as possible the implements and forces which are employed for its destruction. The cannon shot is the most formidable agent of destruction a ship has to encounter. The calibre, range, and force of these projectiles are too well known to be matters for doubt and speculation; and we should as much think of suggesting shields for shot, as coats of mail for the body that has to resist them.

Wooden ships cannot resist iron shot, and when a ball strikes it must tell its bitter tale of injury. Their splinters often do more mischief than an iron shell by its explosion on a deck. Still they have their virtues. "They are buoyant, easily repaired, carry sail well, and are good sea boats;" but these recommendations belong to times far passed. The iron ball is growing in size, its flight will soon be without a limit in length, and its force increases in a cubical ratio. The wooden ship must, therefore, have its shield of steel plates, or its doom is certain. Our "hearts of oak" are at a discount in the great market of mechanical contrivances and appliances. The Hindoo and the Chinaman will shortly become as valuable gunners as our honest tars in these rifle-cannon days. The gun does all, and efficiency in its use would make a Bob Acres as good a gunner as we have at Woolwich, and as dangerous an enemy as CŒUR DE LION. The long-range school must, in fact, make all nations equal in war; and as "long balls" suit the standard of valour of the races who have hitherto held the British grappling-iron and broadside in holy horror, it is quite obvious that we must adopt some system of building ships which shall be fit to cope with the new order of warfare.

That iron is the only material to resist iron is almost universally admitted. Our metal shipbuilders have, therefore, their work before them. Buoyancy and unquestionable strength are the two great elements they

have to develope, and guarantee to the nation in their future production of ships of war. Every superficial foot of the outer casing of our ships must have a power of resistance equal to a square foot of solid iron. This is what is literally meant by steel-coating vessels. Can this be secured by any hollow iron-work applicable to shipbuilding? This is the question! We are assured by competent judges that this vitally important object has been already attained. Mr. JOHN CLARE's principle of building iron ships is said to give as great buoyancy as wood, and to possess a resisting strength equal to solid iron of the same thickness. If this be true, a grave responsibility rests on the shoulders of the Government who have neglected so important a subject, and have not given the country a fair trial of Mr. CLARE's principle of metal shipbuilding. We have no wish that the country should be cajoled into adopting this or that man's plan, but we do, with every other rational man in the empire, expect that the public money shall not be expended in one solitary channel, and to the exclusion of those men who have devoted their lives and fortunes to a subject which has become one of paramount importance to the State.

DRAINAGE OF COLLIERIES.—No. I.

In the approaching Parliamentary session a bill will be introduced under the title of "The Tyne Coal Drainage Bill," in which powers are sought by certain parties to effect a combined system of draining the coal fields east of Newcastle, which include the celebrated Wallsend Colliery, at present abandoned in consequence of the accumulation of water within its workings. It is proposed to lay a small acreage rent upon the owners of royalties in the district, who will be benefited by the proposed scheme; the amount named is from 1s. to 7s. 6d. per acre, and a small tonnage rent for the redemption of the capital intended to be raised to carry out the objects of the Act. The project is one of considerable importance, and as the coal fields in other parts of the country may come under somewhat similar conditions, the following extract from Fordyce's "History of Coal and Iron," in reference to this subject, cannot fail being acceptable to a portion of our readers:—

To obviate the uncertainty in sinking and working collieries, and to recover the large quantities of coal necessarily left as barriers, a proposition has been brought before the coalowners of the North of England to simultaneously drain different parts of an important portion of the northern coal field. This extended system of drainage has been suggested and ably advocated by Mr. T. J. Taylor, agent to the Duke of Northumberland. The aggregate feeders in that portion of the northern coal field between Newcastle and Tynemouth is estimated at 4060 gallons per minute; and to drain this important portion of the coal district, Mr. Taylor proposed to lift a part of this water in the rise portion of the basin, with a view to save depth and consequent expense. For this purpose Tyne Main Colliery is referred to as being well situated; and at this point 1400 gallons per minute might be lifted, leaving 2600 gallons to be lifted in the other portions of the basin. Keeping the same principle in view, of not lifting the water from a greater depth than necessary, a second engine might be placed at (say) Wallsend, to raise 1300 gallons per minute, from a depth of about 100 fms. To effect this an engine of 240-horse power would be required. The most advantageous place for a third station would be the Howden pit, Percy Main Colliery, which is very nearly the lowest point in the basin. Here 1300 gallons per minute would have to be lifted from a depth of 135 fms., requiring an engine of 320-horse power; but with a view to provide for a possible, though not probable, increase of water, and also to enable the waste to be lifted out in a shorter period, it is proposed to place two engines on this pit, each of 250-horse power. These four engines would lift from the high main, below which the feeders are inconsiderable, and could, it is assumed, be kept down by means of the winding-engines with water tubs. The engines would be placed where shafts are already sunk, and the expense of constructing them, with houses and pumping apparatus complete, may be estimated, including contingencies, at 32,000*l*. The rent value of an acre of Bensham seam, 5 ft. high, allowing 1-8th for loss, and reckoning 20s. per ton on round, and 10s. per ton on half of the small coals produced, is 97*l*. Therefore the rent value of 330 acres of Bensham seam only (exclusive of other seams) would be equal to the cost of constructing the engines. A barrier of 40 yards around a single royalty of 900 acres, comprises an area of between 70 and 80 acres, the rent value of which is between 7000*l*. and 8000*l*. It is calculated that, in the aggregate, about 114 miles in length of barrier, in one seam only, will be required to enclose the several royalties in this district; and supposing the barriers to be 40 yards in thickness, the aggregate area of coal thus sacrificed is 1660 acres, the rent value of which, in the Bensham seam alone, is 161,020*l*.; and if this be doubled for other seams, the amount so sacrificed is 322,040*l*.

The foregoing calculations do not comprise any amount for lessees' profit. On a consideration of all the circumstances, it appears equitable for the lessors to incur the cost of erecting the engines, the lessees afterwards keeping them in operation. As regards the distribution of the expense amongst the lessors, the high main seam may be regarded as exhausted in the district; but a large proportion of the Bensham seam, and nearly the whole of the other seams, remain unworked. As all have, therefore, within the limits assigned a direct interest in the measure, it does not appear necessary to calculate minutely the quantity of workable coal in each individual case, but rather to simplify the subject, by assuming proportions corresponding with the surface extent of the respective royalties, unless a special reason be given to the contrary in any particular case. A line drawn northward from Newcastle to the 90 fathom dyke, thence following the course of the dyke eastward, thence passing southward by the outcrop of the high main to the River Tyne, thence crossing the Tyne, and comprising within its southern boundary the royalties of Hilda, Jarrow, Hebbush, Heworth, Tyne Main, and Felling, containing an area of above 26 square miles, or about 17,000 acres. The cost, therefore, to the lessors would be at the rate of 37s. per acre on the respective extents of royalty. This would be for a royalty of 400 acres, 740*l*.; for 600 acres, 1110*l*.; for 800 acres, 1480*l*. The cost of keeping the engines going is estimated at 8800*l*. a year, which might be divided in the proportion of the vends of each colliery. The round and small coals vended from the district would probably be about 350,000 chaldrons yearly, upon which the above cost of 8800*l*. a year is equal to 6·03d. per chaldron.

Mr. Taylor, in advocacy of his subject, alluded to the injurious and often fatal consequences of suspended drainage; that where an upper seam is worked out it has become, or is fast becoming, almost a rule in our district to dam back its feeders, this being done not only with a view to save the lifting of these feeders, but also to secure the immediate tract of mining ground which is being worked against the possible influx of water from other royalties whose drainage has been discontinued. The entire process thus results in the creation of a deep lake overhead, beneath which the future mining operations of the country are to be conducted. Such is the condition of a part of our coal field adjoining a great shipping port, and such are the expedients that must be had recourse to for the purpose of meeting a state of things which cannot be contemplated without alarm and vexation. The object sought to be obtained, the writer concludes, is one of immense economy, of safety, and of right engineering practice.

MANUFACTURE OF IRON.

Mr. George Holcroft, of Manchester, has specified an invention, the first part of which applies to blast-furnaces for melting iron ore, and consists in forcing carbon in a gaseous state into the lower part of the furnace with the hot or cold air, or through a separate blast-pipe; the carbon thus introduced combines with the ore, and improves the quality of the iron produced. The proportion of carbon found most beneficial is 120 cubic feet to 1 ton of the ore.

The second part of the invention applies to the processes of converting cast-iron into bar or wrought-iron, and consists in combining charcoal with the coke used for heating the metal. When this part of the invention is applied to the process of puddling, the fuel employed is prepared in the proportion of one part by weight of wood-charcoal to four parts of coke; and in order to obtain a sufficient heat, a blast of air is introduced into the puddling furnace. The quality of iron is considerably improved by introducing charcoal among the iron in the puddling furnace when the iron is in a molten state: 10 lbs. of charcoal to 2 cwts. of iron will give a good result, and this charcoal can be put into the furnace all at once or at different times. In the heating process, the reverberatory furnace may be dispensed with, and a furnace used in lieu thereof, in which the iron with the fuel is placed on a grate or hearth, through which a current of air or blast is forced, to produce the requisite degree of heat. The fuel employed is prepared in the proportion of one part by weight of charcoal to five parts of coke. Where it is desirable to use the ordinary reverberatory furnace, one part of charcoal is added to three parts of coke. In order to produce a strong iron, suitable for railway rails and other purposes, when coal is employed as fuel in the ordinary manner, bruised or crushed coke is combined with the iron in the puddling furnace, the said coke being introduced into the furnace when the iron is in a molten state, in the proportion of ¾ cwt. of coke to 2 cwts. of iron; but when coke is employed as fuel, about ¼ cwt. of crushed coke is introduced to 2 cwts. of iron: in this latter case, the heat must be increased by means of a blast.

The third part of the invention applies to the ordinary cupolas in which pig-iron is melted for making iron castings, and consists in forcing carbon in a gaserous state into the lower part of the cupola, in the proportion of about 60 cubic feet of carbon to 1 ton of iron melted.

The fourth part of the invention consists in mixing various descriptions of ores, possessing different qualities, in certain proportions, so as to obtain very strong pig-iron from the blast-furnace.

Hematite ores are divided into two classes—the heavy flinty lumps, or hard hematite ores, as distinguished from the soft or small hematite ores. In producing foundry iron, the patentee takes about one-third of the hard hematite iron ore and two-thirds of the soft or small hematite ore. To make puddling iron, he takes four-sevenths of the hard hematite iron ore to three-sevenths of the soft or small ore. In producing pig-iron from the Yorkshire and Staffordshire ironstone, combined with hematite ore, he takes about 19 parts of the Yorkshire or Staffordshire ironstone to 13 parts of a mixture of the hard and soft hematite iron ores, in the proportion of one-third hard and two-thirds soft. When the Welsh and Durham ironstone is employed, he takes about four-sevenths of the ironstone to three-sevenths of the hematite iron ores, in the proportion of one-third hard and two-thirds soft.

The last part of the invention consists in governing the speed of the engine by which the blowing-machine is driven, according to the pressure of the blast, in order to obtain a uniform pressure on the air for the blast-furnace. This may be accomplished by the action of the air in the blast-pipe on a piston or other equivalent agent, which is in communication with the throttle or other valve of the engine. When the speed of the steam-engine is increased, owing to a reduction in the pressure of the blast, the ordinary steam-engine governor, or other apparatus worked by the engine, acting on a throttle valve, reduces the supply of steam until the engine has regained its proper speed.

The patentee claims,—1. The application of carbon in a gaseous state to the blast-furnaces for melting iron ore.—2. The combination of charcoal with the coke used in the processes of converting cast-iron into bar or wrought-iron.—3. The combining of charcoal with the molten iron in puddling furnaces.—4. The combining of bruised or crushed coke with the molten iron in puddling furnaces.—5. The application of carbon in a gaseous state to cupolas used in melting pig-iron.—6. The various combinations of ores described for producing very strong pig-iron from the blast-furnace.—7. The governing the speed of the blowing-machine according to the pressure of the blast, as described.

THE FURNACES IN AND OUT OF BLAST IN THE UNITED KINGDOM OF GREAT BRITAIN.

[From Mr. Samuel Griffiths' "Staffordshire Iron Trade Circular"—obligingly corrected by Mr. Griffiths for the *Mining Journal*.]

WOLVERHAMPTON AND BILSTON DISTRICT.

Proprietors.	Works.	Furnaces.	In.	Out.
Addenbrookes, Smith, and Pidcock	Rough Hay	3	1	2
Aston, John, and Co.	Wolverhampton Fur.	3	1	2
Bagnall, John, and Sons	Capponfield	3	2	1
Bagnall, John, and Sons	Goldshill	3	2	1
Baldwin, William, and Co.	Bovereux	2	1	1
Banks, Thomas, and Son (late)	Barbor's Field	2	0	2
Bennitt, William	Oldbury	4	4	0
Blackwell and Co.	Bilston New	5	3	2
Chillington Company	Chillington	4	4	0
Chillington Company	Moseley	3	0	3
Chillington Company	Bentley	2	1	1
Colbourn, John, and Sons	Horsley	4	3	1
Cresswell, Edward, and Sons	Tipton	2	2	0
Davies, Bloomer, and Co.	Pelsall	2	2	0
Fryer, William F., Esq.	Hatherton	2	1	1
Fletcher, Solly, and Urwick	Willenhall	3	2	1
Griffiths, Samuel	Bilston Brook	3	0	3
Gibbons, Benjamin	Millfields	4	4	0
Groucutt, Samuel, and Sons	Broadwaters	3	3	0
Giles, Frederick	Stour Valley	1	1	0
Haines, Job and Henry	Willingsworth	3	3	0
Hickman, G. H. and A. (late)	Stonefield	1	0	1
Hopkins, John, and Sons	Dudley Port	2	2	0
Highway, T. and C. (late)	Birchills	2	0	2
Jones, David	Herberts Park	1	1	0
Jones and Murcott	Bilston	3	2	1
Jones, John	New Birchills	5	2	3
Lloyds, Fosters, and Co.	Wednesbury Old Park	3	3	0
Mills, Samuel	Darlaston Green	3	3	0
Moorcroft Colliery Company	Halifields	1	0	1
Morris, Thomas (Inspectors)	Park Lane	2	1	1
Motteram and Deeley (late)	Toll End	2	0	2
Osier Bed Iron Company	Osler Bed	3	2	1
Onions, W. J. and G.	Stour Valley	1	1	0
Parkfield Iron Company	Parkfield	5	4	1
Pemberton, Thomas H. (late)	Deepfields	3	0	3
Perry, F. C. (late)	Roughwood	2	0	2
Roberts and Homfray	Tipton Green	4	2	2
Sparrow, W., and Co.	Stow Heath	5	3	2
Thorneycroft, G. B., and Co.	Bradley*	2	0	2
Thomson, G., and Co.	Crookhay	4	2	2
Turley, I. and T.	Coseley	2	2	0
Williams, P., and Sons	Union	3	3	0
Williams, P., and Co.	Wednesbury Oak	3	3	0
Ward, William, and Sons	Priestfields	3	2	1
Ward, William, and Sons	New Priestfields	2	1	1
Whitehouse, H. B.	Priorfields	3	3	0
Total		131	82	49

DUDLEY DISTRICT.

Blackwell and Co.	Russell's Hall	5	3	2
Bradley, John, and Co.	Shut End	4	3	1
Badger, Thomas and Isaac	Old Hill	2	1	1
Cochrane and Co.	Woodside	3	2	1
Dudley, Earl of	Coneygre	3	2	1
Dudley, Earl of	Level	3	2	1
Dawes, W. H.	Withymoor	2	1	1
Evers and Martin	Parkhead	2	1	1
Firmstone, W. and G.	Oak Farm	2	0	2
Firmstone, W. and G.	Lays	3	2	1
Griffiths, Samuel	Windmill End	3	0	3
Grazebrook, M. and W.	Netherton	2	2	0
Gibbons, Benjamin	Ketley's	3	0	3
Gibbons, Benjamin	Corbyn's Hall, New	4	2	2
Hall, Holcroft, and Pearson	Brettel Lane	2	1	1
Hall, Holcroft, and Pearson	Old Level	2	1	1
Haden, William	Dixon's Green	1	0	1
Hingley, Noah, and Sons	Netherton and Dudley Wood	6	2	4
Mathews, William	Corbyn's Hall	4	3	1
New British Iron Company	Corngreaves	6	4	2
Total		62	32	30

SHROPSHIRE.

Botfield, Beriah	Dark Lane	2	2	0
Botfield, Beriah	Hinkshay	2	1	1
Botfield, Beriah	Langley Field	1	0	1
Coalbrookdale Company	Castle	2	1	1
Coalbrookdale Company	Horsehay	2	1	1
Coalbrookdale Company	Lawley	1	1	0
Coalbrookdale Company	Lightmoor	2	2	0
Foster, W. Orme	Madeley Court	3	2	1
Ketley Company	Ketley	2	1	1
Lilleshall Company	Lilleshall	8	8	0
Madeley Wood Company	Madeley Wood	3	3	0
Old Park Iron Company	Old Park & Stirchley	4	3	1
Total		32	25	7

FOREST OF DEAN.

Cinderford Iron Company	Newnham	4	2	2
Forest of Dean Iron Company	Park End	2	1	1
Gibbons, Benjamin	Soudley	2	1	1
Total		8	4	4

NORTH STAFFORDSHIRE DISTRICT.

Trustees of late T. Kinnersley, Esq.	Clough Hall	4	4	0
Williamson Brothers	Goldendale†	4	3	1
The Earl of Granville	Shelton	8	7	1
W. Hanbury Sparrow, Esq.	Longton Lane End	3	2	1
Fenton Park Iron Company	Fenton Park	2	2	0
T. E. Heathcote	Apedale	4	2	2
Stanier and Heath	Silverdale	4	2	2
R. Heath, Esq.	Biddulph Works	2	2	0
Total		31	24	7

STOCKTON AND DARLINGTON DISTRICT.

Bolckow and Vaughan	Cleveland Furnaces	9	9	0
Bolckow and Vaughan	Middlesboro'-on-Tees.	3	3	0
Bolckow and Vaughan	Witton Park	4	4	0
Snowdon and Hopkins	Tees Side Ironworks	2	2	0
The Weardale Iron Company	Tow Law	5	3	2
The Weardale Iron Company	Stanhope	1	0	1
B. Samuelson and Co.	South Bank Ironwrks.	3	2	1
The South Durham Iron Company	South Dur. Ironworks	3	2	1
Warners, Lucas, and Barrett	Norton Furnaces	3	2	1
Gilkes, Wilson, Pease, and Co.	Tees Ironworks	5	3	2
Holdsworth, Benington, Byers, and Co.	Stockton-on-Tees	3	2	1
Clay Lane Iron Company	Clay Lane Wks., Eston	3	2	1
Cochrane and Co.	Ormesby Ironworks, Middlesborough-on-Tees	4	3	1
Bell Brothers	Port Clarence	6	4	2
The Derwent Iron Company	Consett	17	10	7
Jones, Dunning, and Co.	Normanby	2	0	2
Whitwell, W., and Co.	Thornaby‡	3	0	3
Marchioness of Londonderry	Seaham Harborn‖	4	0	4
Total		80	51	29

NEWCASTLE-ON-TYNE DISTRICT.

Birtley Iron Company	Birtley Ironworks	3	2	1
Losh, Wilson, and Bell	Walker Ironworks	5	3	2
Bell, Hawks, and Co.	Wear Ironworks	1	1	0
H. L. Pattinson and Co.	Felling Works	2	0	2
Bell Brothers	Wylam Works	1	1	0
Jarrow Iron Company	Jarrow	6	4	2
Jarrow Iron Company	Wallsend			
James Morrison	Ferry Hill§	2	2	0
Total		20	13	7

* New, not yet completed.
† Blow another out immediately.
‡ Now building, ready in June.
‖ Two nearly ready to blow, other two to follow.
§ One more building.

LANCASHIRE AND CUMBERLAND DISTRICT.

Proprietors.	Works.	Furnaces.	In.	Out.
Smith and Co.	Seaton	2	0	2
E. Lewis	Harrington	1	0	1
Schneider, Hannay, and Co.	Barrow*	4	4	0
Whitehaven Hematite Iron Company	Whitehaven Hemat. Ironworks	4	4	0
Workington Hematite Company	Workington Hem.	4	4	0
Harrison, Ainslie, and Co.	Newland, Bush Bar. Duddon, Lorn†	4	4	0
Kirkless Hall Hematite Company	Kirkless Hall	4	4	0
Total		23	20	3

YORKSHIRE DISTRICT.

Hird, Dawson, and Hardy	Low Moor	9	6	3
Bowling Iron Company	Bowling	6	5	1
W. H. and George Dawes	Elsecar	3	2	1
W. H. and George Dawes	Milton	2	2	0
Total		20	15	5

NORTHAMPTONSHIRE.

Pell, George	Heyford Ironworks‡	3	1	2
Butlin and Co.	Wellingboro'	1	1	0
Total		4	2	2

WILTSHIRE.

Sarl and Co.	Seend	2	2	0
Westbury Iron Company	Westbury	2	2	0
Edwin Knight and Co.	Ashton Vale, Bristol	1	0	1
Total		5	4	1

DERBYSHIRE.

Oakerthorpe Iron Company	Near Alfreton	2	1	1
James Oakes and Co.	Alfreton	3	2	1
Clay Cross Company	Clay Cross	3	2	1
Wingerworth Iron Company	Wingerworth	3	2	1
Stanton Ironworks Company	Stanton	3	2	1
Richard Barrow	Staveley	2	2	0
H. B. Whitehouse and Sons	West Hallam	3	2	1
Butterley Iron Company	Butterley Ironworks, Alfreton	3	2	1
Butterley Iron Company	Codnor Park	4	3	1
Dunstan and Barlow Company	Near Chesterfield	4	4	0
Total		30	22	8

SOUTH WALES DISTRICT.

Crawshay Bailey	Aberamman, Glamor.	3	3	0
Aberdare Iron Company	Abernant	3	2	1
Aberdare Iron Company	Abernant-Glyn Neath	3	1	2
Aberdare Iron Company	Aberdare	3	3	0
Aberdare Iron Company	Banwen	2	0	2
Briton Ferry Iron Company	Briton Ferry	2	2	0
Rhymney Iron Company	Bute	6	5	1
T. M. Talbot	Cefn Cwsc	2	0	2
Governor and Company of Copper Miners	Cwn Avon	5	5	0
Governor and Company of Copper Miners	Oakwood	2	2	0
M. Crawshay and Sons	Cyfarthfa	7	7	0
Guest and Co.	Dowlais and Ivor	18	15	3
Anthony Hill	Duffryn	5	5	0
Wayne and Co.	Gadlys	4	3	1
Llynvi Iron Company	Llynvi	4	3	1
R. P. Lemon and Co.	Maesteg	4	0	4
William Parsons	Onllwyn or Bryn	2	1	1
T. W. Booker	Pentyrch	2	2	0
William Forman	Penydarren	7	0	7
Anthony Hill	Plymouth	5	5	0
Francis Crawshay	Treforest	3	0	3
Brogden and Sons	Tondu	2	2	0
N. Vaughan	Venait	2	0	2
William Crawshay and Sons	Ynisfach	4	4	0
Ystalyfera Iron Company	Ystalyfera	11	5	6
Ebbw Vale Iron Company	Abersychan, Mon.	6	4	2
Ebbw Vale Iron Company	Ebbw Vale	4	3	1
Ebbw Vale Iron Company	Pentwyn	1	0	1
Ebbw Vale Iron Company	Sirhowy	5	3	2
Ebbw Vale Iron Company	Victoria	4	3	1
Blaenavon Iron Company	Blaenavon	4	4	0
Frederick Levick	Blaina	2	2	0
Frederick Levick	Cwm Celyn	3	2	1
Frederick Levick	Coalbrook Vale	2	2	0
J. Lawrence	Cwm Bran	1	1	0
J. and C. Bailey	Nantyglo	7	6	1
Pontypool Iron Company	Pontypool	4	4	0
Rhymney Iron Company	Rhymney	3	3	0
Tredegar Iron Company	Tredegar	9	9	0
Crawshay Bailey and Wm. Morgan	Varteg	2	1	1
Crawshay Bailey and Wm. Morgan	Golonos	3	0	3
Amman Iron Company	Bryn Amman, Caer	2	2	0
Daniel Watney	Gwendraeth	3	1	2
Frederick Harrison	Trimsaran	2	0	2
Wm. Parsons	Abercrave, Brecknock	1	1	0
J. and C. Bailey	Beaufort	8	7	1
Powell and Co.	Clydach	4	4	0
Francis Crawshay	Hirwain	4	0	4
Yniscedwyn Iron Company	Yniscedwyn	6	2	4
Pembroke Iron and Coal Company	Sandersfoot, Pembrok.	2	0	2
Total		203	139	64

NORTH WALES DISTRICT.

Brymbo Company	Brymbo, Denbighshire	2	2	0
British Iron Company	Ruabon	3	2	1
Gandy, Mr.	Leeswood	2	1	1
Giller, Mr.	Plas Maddor	1	0	1
Jukes, Joseph (late)	Ponkey	1	0	1
Sparrow and Poole	Frood	2	1	1
—	Dollydd	1	0	1
—	Rhos Hall‖	2	0	2
—	Trydon	1	0	1
Total		15	6	9

SYNOPSIS OF FURNACES IN AND OUT OF BLAST.

Districts.	Number.	In blast.	Out.
Wolverhampton and Bilston district	131	82	49
Dudley district	62	32	30
Shropshire	32	25	7
Forest of Dean	8	4	4
North Staffordshire	31	25	6
Stockton and Darlington	80	52	28
Newcastle-on-Tyne	20	13	7
Lancashire and Cumberland	23	20	3
Yorkshire	20	15	5
Northamptonshire	4	2	2
Wiltshire	5	4	1
Derbyshire	30	22	8
South Wales	203	139	64
North Wales	15	6	9
Scotland	175	131	44
Total	839	572	267

[We published a list of blast-furnaces in Scotland in last week's Journal.]

* Two more building.
† Charcoal iron.
‡ Just blowing in a second.
‖ Partly erected; now standing.

REPORT FROM NORTHUMBERLAND AND DURHAM.

[FROM OUR CORRESPONDENT.]

JAN. 10.—The weather still continues extremely severe; such a severe winter, indeed, is not within our recollection. Consequently coal is in great demand, and good prices are realised for home consumption. The progress of many of the works is, however, obstructed by heavy falls of snow, which blocks up the lines of railway. The Elswick Coal Company are now rapidly developing the colliery at Elswick, a considerable number of men being employed, about 100 coal hewers alone being now at work. The coal is of good quality, but the seam is rather thin. The thickness also varies considerably, this being a characteristic of the Brockwell seam. It generally varies from 2 ft. 8 in. to 3 ft. in thickness.

There is no change to notice in the Iron Trade. Those works continue to absorb large quantities of coal and coke, and any improvement in price would soon increase the quantity. The demand for coke continues good. Stocks of all kinds in those trades are low, so that the present demand must continue for some time. The quantity of coals sent to London during last month was 332,290 tons, and in December, 1859, 333,431 tons. From Jan. 1 to Dec. 31, 1860, 11,226 ships, 3,573,377 tons; and for the corresponding period of 1859, 3,299,170 tons, which shows an increase in the present year of 274,207 tons.

The adjourned inquest on the bodies of the persons killed at the Hetton explosion was resumed on Tuesday. Mr. Dickinson, Government Inspector for the Manchester district attended in the absence of Mr. Atkinson, and Mr. Matthias Dunn, Government Inspector, also attended. The first witness examined was George Lowden, overman. He examined the workings in the west minor pit, previous to the men commencing work on the morning of the day on which the explosion occurred, the explosion having occurred at 9 o'clock at night. He said he found no gas in any part of the workings, and he came out by the return air-course to the furnaces, and found it free from gas. He stated his opinion to be that the explosion had gone from the flues. The injury caused by the explosion had spread from the flues north and south. He has had charge of the west minor pit the last thirteen years, and has seen no gas in his working places the last four months. At that time there was a little gas in the pillar workings. The gas could not have come from those places to the engine flues. Thos. Smith,

master shifter, was the next witness examined. He went into the pit at six o'clock in the evening, and had charge of all the men employed in the pit during his shift. He examined and locked all the Davy lamps of those men who used them. He described the position of the men employed. Some of those men had open lamps, but they were working in the main intake, where the air-current was very strong. He was about 800 yards down the east-way when the explosion occurred. He was thrown down. The blast came from the west. He, with some others, succeeding in reaching the bottom of the shaft, where they remained until seven o'clock the next morning, when they passed through to the Eppleton shaft, where they safely got to surface. He had never seen any gas in any part of the works. Could not state the quantity of the air, nor could he state the cause of the explosion. There is an upper seam called the Low Main: did not consider it possible for the gas to come from that seam. Four of his men were cutting places of refuge in the north way. They could not have cut through into any of the returns. John Curry, the furnaceman, having deposed that up to the time of the explosion there was no appearance of gas, said: I was going in to fire when a strong wind from the force of the explosion met me. I had a good fire in, and there was a strong air coming to it. I supplied the fire with coals five or ten minutes previous to that time. After the explosion took place the air came back from the furnace instead of going to it. I said, "Oh dear! its fired some way;" and I made my way through the first door as fast as I could, coming out to the downcast shaft. The force of the explosion was very great before I got through the door, but after getting through I did not feel it. I did not observe any fire in the stables. I proceeded nearly to the shaft of the west minor pit. I came to some props. Between the end of these and the shaft the roof was falling in all directions. I stayed there because I was in fresh air. I stopped there nearly half an hour, till the other men came with lights, with whom I went to the Eppleton Pit. The air was very good from the time of my going in to the time of the explosion. I can form no opinion where the explosion took place. I have not been down the pit since.

The only other important witness examined was Mr. Isaac Lowthian Bell, of the Washington Chemical Works. He had examined the flues, and he described their appearance, and stated his opinion to be that the explosion had occurred in them, from the manner in which the brick-work was blown outwards, &c. He stated the area of the flues to be 7000 cubic feet, and to fill a flue with light carburetted hydrogen, leaving a sufficient content for the necessary atmospheric air to thoroughly explode the light carburetted hydrogen contained in the flues, 152 lbs. of fresh coal would furnish the whole gas necessary. I find to fill the same flue with another explosive gas—carbonic oxide—49 lbs. of coke would be sufficient. Supposing, then, the flues were filled with either of these gases, together with the necessary atmospheric air required for their explosion—a state of things which might readily occur from damping the coals—then the combustion of the coal at the boiler end, or the furnace at the far end, either one or both could supply the flame for setting on fire this magazine of inflammable gas. Now, the next question is, supposing that to have taken place, is this damage of a character to have ensued from such an explosion? I may state that in my own experience I had a wrought-iron pipe, 3 ft. in diameter and about 100 yards long, filled with an explosive compound, in which the combustible gas was carbonic oxide, the less explosive of the two. In round numbers, it has about half the power of light carburetted hydrogen. That pipe fired at one end by a lamp blew the man holding it many yards into the air, breaking every bone in his body, destroyed almost the whole length of iron pipe, and split the blowing apparatus of metal, ¾ in. thick, at the far end. Consequently my opinion is based upon these facts, and upon philosophical calculation of the power of such a quantity of gas, or much less; all the results that I have this day seen are easily accounted for. As soon as ever the contents of the flue took fire, supposing it to be filled with an explosive mixture of light carburetted hydrogen, the 7000 feet contained in it would instantly become 60,000 cubic feet. Of course, that increased volume would run down any point to which it could gain most ready access. (Some of the bodies were found in a straight line from the place of the origin of the explosion.) But, in addition to that, the contents of this place would be instantly converted into after-dame; as this being taken up by the natural ventilation of the colliery would be carried into the workings, and thus cause the death of every man over whom it passed. I think it highly probable the explosion might have set fire to the north stables, a distance of 350 yards, not because flame would travel that far, but because particles of inflammable matter set fire to by the explosion would be driven in the direction of the stables, and besides the temperature of these exploded gases being about 1500° Fahr., or a very bright red heat, would of itself if coming near hay or straw immediately set fire to it. In this way, I think, everything that has occurred can be fully accounted for, as far as I have seen. It is quite my opinion that this explosion could have been caused by some quantity of gunpowder, but it would take 75 quarter barrels of 25 lbs. each to produce anything like the effect you have here. It is perfectly impossible, *a priori*, to know how much gas has exploded, but seeing and knowing the manner in which the explosion is generated, then we have the means of coming literally or literally to the amount. In my calculations I took 1 ton of coal to produce 10,000 cubic feet of gas, and about 650 ft. of light carburetted hydrogen are produced by 150 lbs. I add to 9½ times the atmospheric air—that is, 6330 ft. of explosive mixture. Assuming no steam to be present, no quantity of soot deposited in this flue could have added to the violence of the explosion. Assuming the steam was present, then I think it possible that the explosion might have been increased somewhat in intensity. I think it probable that the flue ascending from the boiler-fire, including the crossing the gas, would have lodged in it. All calculations based upon the difference of specific gravity of gases are liable to disturbance by differences of temperature, by which means a cubic foot of heavy gas may be rendered lighter, or as light, as a cubic foot of lighter gas. If the gas were only contained in that part of the flue, it would reduce the gas to about 3000 cubic feet; that would be sufficient to cause the explosion. The quantity in my own case was between 1000 and 1200 feet.

The gas either over-saturated or under-saturated with air would be quite equal to the effects produced. After the crossing had been blown down a larger amount of air would be admitted to mix with the hydrogen gas. I doubt whether it would increase the intensity of the explosion; it would depend on collateral circumstances. There is no reason that suggests itself to me for the gas accumulating in this way and exploding, when it has done so for so many years before. It is one of those things affected to some extent by the doctrine of chances—that is, you require inflammable gas, atmospheric air, and fire contemporaneously. Any one of these wanting, and no explosion ensues. The frosty weather, I think, would not render the explosion more violent; I do not attribute any importance to the frost.

JAN. 10.—The Hetton Colliery inquest was again resumed, when several more witnesses were examined. William Gardiner, a miner, was the first witness who was examined: his evidence is not important. Ralph Hope was next examined, a miner, who was taken from the pit in a very exhausted state, and with difficulty recovered. Robert Young, the back overman, was examined, and stated that the ventilation of the pit was good during the time he was in charge—that is, from nine o'clock a.m., until half-past five p.m. There was no accumulation of gas in any part; examined the goaves, and did not find any gas. Some repairs had been made in the upcast shaft, and a candle had been in the shaft from Sunday night until Tuesday night previous to the explosion. Everything was put into the usual course on Wednesday morning. All the witnesses concurred in the view that the explosion had taken place in the flues, and that it could not occur from any gas from any part of the workings. The total quantity of air passing down the shaft was upwards of 157,000 cubic feet per minute. The last witness examined was Dr. T. Richardson, of Newcastle, an eminent chemist. His views agree in every important particular with those of Mr. Bell, examined yesterday. It is, therefore, unnecessary to give an outline of his evidence. The inquest was adjourned.

FRIDAY NIGHT.—The inquest was resumed and concluded to-day, the jury, after mature deliberation, returning the following verdict:—"That the said John Greaves and 20 other persons who, on Dec. 20 last, came by their deaths in the east and west minor pits of the Hetton Colliery, had been killed by an explosion of inflammable gas, which had accumulated in the flue from the boiler of Davison's engine to the upcast shaft, which gas was not generated in the workings of the said pit."

[FROM ANOTHER CORRESPONDENT.]

JAN. 9.—Mr. Dickinson made, last Friday, an official visit to Haswell Colliery, which, I understand, has proved the workings to be anything but in the satisfactory condition previously certified by a deputation of pitmen. The adjourned inquest at Hetton was resumed yesterday, and will continue to-day. So far, I think, it looks much more probable that the fire has originated in the boiler-flue. Mr. Dickinson has done very great service by his thoroughly independent assistance at the inquest. The fire in the underground stables, I am informed, still rages with little abatement.

THE IRON AND METAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT AT WOLVERHAMPTON.]

JAN. 10.—The Ironmasters' Quarterly Meetings, held yesterday in this town and to-day in Birmingham, have, as was anticipated, proved extremely quiet. Very few transactions have taken place at either meeting, although that of to-day was not quite so flat as the meeting of yesterday. There were a few members of the trade from the north-east of England districts, but the leading exporters of Liverpool and London were scarcely represented. Whilst the official list of prices remains unaltered, only a few makers of first-rate quality can hope to obtain those rates, and current prices of finished iron are fully 2s. 6d. a ton lower than they were three months ago, and the supply of orders is very slack indeed; in fact, the trade wears much the appearance it did three years ago, when so many failures occurred. At the present moment a great many of the houses which then succumbed are no longer in existence, but there are still many firms in a position which excites anxiety. The advance of the rate of discount has had a very depressing effect, because it is felt that it may proceed further, and not only are high rates charged, but bankers are naturally indisposed to look at doubtful paper, and are desirous of strengthening their position by retaining their funds to a greater extent.

In the Pig-Iron Trade the great depression previously reported continues unabated, and there are hardly any purchasers. Stocks are increasing, and a diminution of the make appears a matter of urgent necessity. Unfortunately, many of the makers are unable to curtail their operations, or to abstain from selling, as the continued produce of their furnaces is absolutely necessary to enable them to meet their payments. It is difficult to quote prices, as there are scarcely any transactions. The depressed state of this branch of the trade of South Staffordshire is illustrated by the statement in Mr. S. Griffiths's "Iron Trade Circular," and quoted elsewhere. Comparing this statement with others published at previous periods, the following results appear for this district:—

BLAST-FURNACES IN SOUTH STAFFORDSHIRE AND EAST WORCESTERSHIRE.

	In Blast.	Out.	Total.
—— 1852	127	32	159
Sept., 1857	157	22	179
Dec., 1857	111	69	180
Dec., 1858	132	51	183
Aug., 1859	132	56	188
Jan., 1861	116	77	193

From this statement it appears that the number of blast-furnaces in operation is less than in 1852, and only five more than in the great period of depression which followed the crisis of the autumn of 1857, when forty-six were blown out. It is not improbable that, unless the demand improves, the number of furnaces in blast will be diminished shortly to a lower point than that at which they stood at the close of 1857. When it is remembered that upwards of two-thirds of the blast-furnaces in the district are out of blast at this moment, and that in the whole kingdom not much less than that proportion are in the same position, the probability of a great advance in the price of pig-iron appears remote, as an advance in price would at once be checked by more furnaces being put to work. No doubt a considerable number of the furnaces out of blast are in such positions, or are so much dilapidated as to make it improbable that they will ever again be put into operation, but to a greater proportion this remark does not apply.

The Coal Trade is still active, but some of the minor canals are frozen over, and hence a partial interruption to this branch of the trade has occurred, but the demand is active.

The Hardware Trades of this town, of Birmingham, and South Staffordshire generally are very dull. Many orders for the United States market have been countermanded, and that market is necessarily, from the *dis*united state of the country, almost closed against British goods. The home trade is also slack, and a good deal of want of employment is experienced, and no inconsiderable amount of distress. The strike of the horseshoe-makers continues, the masters in this district and in Derbyshire having, at a meeting held at Lichfield, resolved to resist the demand for an advance of wages as "unreasonable and unjust." The chain trade has been very slack during the year, and is now extremely depressed.

The special rules for collieries in this district have been revised, with a view to adapt them to the recent Act of Parliament, but they are not yet confirmed by the Secretary of State. The alterations made are not important, except such as the new statute rendered necessary.

An explosion of gas took place, on Saturday week, at Bunker's Hill Colliery, at the village of Talk-o'-th'-Hill, near Newcastle-under-Lyme. Fortunately, it happened in a part of the mine where no one was at work. It is probable that a fall took place, and that a quantity of gas escaped suddenly and became ignited. The coal, being of a very bituminous character, took fire. It was not until a second explosion, when some men who were trying to extinguish the fire were slightly burnt, that the workmen left the pit. Seven horses were left in the workings; but, as it was very important to extinguish the fire by shutting out the air entirely, they were abandoned to suffocation. A third man died, on Thursday last, from the effects of the explosion at Silverdale Colliery, noticed last week.

A magnificent entertainment was given to the *employés* of the London and North-Western Railway Company, at Crewe, on Friday last, on the occasion of the completion of additions to the works, &c. No less than 3500 persons sat down, in a room 280 feet long and 75 feet wide, which was splendidly decorated. Thirteen carriages conveyed the provisions and waiters from Manchester to Crewe. Mr. Hardman Earle presided, in the absence of the Marquis of Chandos. The growth of Crewe, the result of railway enterprise alone, is astonishing. Twenty years ago a few scattered farmsteads and two or three cottages were all the residences on a spot where 9000 people now occupy 1500 houses. The works of the company cover an area of 17 acres, and they employ 2000 hands. About 284 trains pass through the station daily. The town is well supplied with gas; water is to be brought to it from an adjoining village; there is a library of 2500 volumes; and other facts accord with these striking evidences of rapid progress.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

JAN. 10.—The state of the Iron Trade still continues very depressed, and though there is a prospect of a better state of things, we incline to the belief that it will not be felt before the spring. The machinists are very actively employed, particularly in the railway department of the trade. The demand for rails is increasing, and there is an unprecedented demand for locomotives, the works at Gorton, in Lancashire, having so many orders on hand that it will require a whole year to execute them. At the Low Moor Ironworks there is much activity prevailing, and the receipt of orders during the past fortnight has been much on the increase.

The Coal Trade is unprecedentedly brisk, and it is found impossible in many districts to supply the orders which are poured in on all hands. The collieries are all at work, but the present severe frost has greatly interfered with the working of some of the collieries, arising from breakages occasioned by the frost. The competition in London in the coal trade has been so remarkable since the Great Northern Railway ceased to be traders in coal, that the increase in exportation to the metropolis has proved to be a remarkable fact in the history of the trade. The most important increase has been in the district of South Yorkshire. Of the 1,477,545 tons 16 cwts. of coal carried to London during the twelve months ending Jan. 1, one-fourth of that immense tonnage has been supplied from the South Yorkshire coal fields, the principal being (in round numbers)—Elsecar, 40,911 tons; Dodworth, 13,314; Gawber, 18,803; Wharncliffe Silkstone, 44,215; Charlesworth's, 9552; Clarke's, 37,928; Cooper and Co., 15,829; Newton and Co., 37,885; Lund Hill, 6663; Whitwood, 38,070; Wombwell Main, 11,298; and Worsbro' Park, 7142. These quantities are by the Great Northern Railway alone. The Midland carried some from this district, but comparatively few, compared with the above figures.

Great efforts are being made in the Erewash Valley to increase the supplies, also facilities are being arranged for an extended traffic on the Midland and Great Northern lines by an increase in the rolling stock.

There have been two fires in the Yorkshire district during the week—one at the Cockey Colliery of Messrs. Knowles and Co., at Radcliffe. Mr. M. Todd, the manager, lost his life in his exertions to save the workpeople, and up to the time of our writing his body still remained in the pit. One person reached the body and endeavoured to drag it out, but failed. The pit is not to be opened before Monday, and perhaps not even then. It is not known how the conflagration originated, as everything appeared to be perfectly safe only a short time before the fire broke out.—On Tuesday morning a fire was discovered at one of the collieries at Rawmarsh, the property of Earl Fitzwilliam. The air-shafts were stopped, and the engines poured large quantities of water into the pit, which up to our present writing had not succeeded in extinguishing the devouring element. It is said that the fire was the work of an incendiary, but the circumstances, as far as we have been enabled to learn, do not justify such an assumption.

A shocking accident has occurred in the Newcastle Coal Pit, Whitemoor, near Nottingham. A portion of the roof of the pit having been left unsupported, a mass, many tons weight, fell in, and two of the men at work were instantly buried in the debris. They were extricated as soon as possible by their companions, but both of them were dead.

The frost is operating prejudicially to the working of the Derbyshire lead mines, very few of them being in a position to do much work.

The Mill Dam Mine is now getting up to a position of great success. The sump, hitherto thought to be the Sun side of the vein, is producing large quantities of ore; it has widened to 6 ft. on the east end, with as good ground in the bottom. There is also very good ground branching off to the south-west; this is very important, as it will very likely meet with the Sun side. The vein discovered last week in the cross-cut is 8 fms. south of the shaft. The bearing part in this cross-cut is 27 in. wide, and the lead of the best quality. The level east is also producing good ore. A west level is to be commenced directly; the prospects in this direction are also as good as the vein, which is 3 ft. wide. We have been informed that 120 wagons have been drawn from the sump in one week, producing about 20 tons of ore.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

[FROM OUR CORRESPONDENT IN SOUTH WALES.]

JAN. 10.—As appropriately following up the remarks of last week as to the state of the Iron Trade, the following extract is taken from the *Star of Gwent*, a journal of high authority on the hills:—"A considerable depression prevails at present in the ironworks of the district. The competition of the North and Staffordshire, where great exertions are made to turn out iron cheaply, is keenly felt, and the South Wales and Monmouthshire ironmasters find it difficult to keep pace with them. One of the main causes of this state of things is that the mines have been entirely exhausted immediately around the different iron-works; and, consequently, the proprietors have to bring the ore from a greater distance, and often, also, by thousands of tons, from neighbouring districts. The additional expense of conveying the ore is a very serious item in the cost of producing the iron. It is hoped and expected that the new Treaty of Commerce with France, when it comes into full operation, and when reciprocally understood on both sides of the Channel, will give a great impetus to the trade. This is really needed, as several works have lately been making much less iron than usual, and both masters and workmen suffer from the slow demand."

The negociations with Mr. Forman for the purchase and carrying on of the Penydarran Works by a joint-stock company are stated to have terminated, and somewhat abruptly, too. The reason publicly assigned is that, after a careful valuation by experienced men, and due consideration on the part of Mr. Forman, that gentleman fixed upon a sum much under that at first named. The committee then offered still less, when Mr. Forman peremptorily declined to make any abatement, but made a claim for the iron in the works. This result is much to be regretted, especially as it is said that a large order to start with had been secured, and an extensive district is still partially paralysed by the stoppage of the establishment. It is to be hoped that the treaty may be renewed. The works comprise no less than seven blast furnaces.

The inquest with reference to the Risca Colliery explosion was resumed at Risca, on Wednesday, before the Deputy-Coroner, Mr. W. H. Brewer, who was assisted in the examination by Mr. Lionel Brough, the Government Inspector for the district in which the pit is situate, and Mr. Thomas Evans, the South Wales Inspector, who, by direction of the Home Secretary, has made a survey of the colliery, in conjunction with Mr. Brough. Mr. T. M. Llewellin and Mr. Owen, solicitors, of Newport, appeared respectively for the owners of the pit and the friends of the deceased, and were allowed to put what questions they deemed proper. Several colliery managers were in attendance. The whole of the day was occupied in taking the evidence of Mr. Harrison, the underground manager. He deposed to an examination made by him of the pit on going down a little after six o'clock on the morning of the explosion, and to his meeting the overman, Evan Beddoes, who reported to him that all was right. Before coming up he measured the air in the main intake, and found 37,500 cubic feet of air going per minute. About two hours and a half after he was informed of the explosion, and immediately returned to the pit, instituted an examination, and assisted in getting out bodies. When he first went down in the morning he had not time to go round the whole of the workings. He traversed some 1200 or 1400 yards. His usual plan was not to examine the whole of the workings, but to go into sections and receive reports. He considered 37,500 feet of air quite sufficient for the safe working of the pit, according to the quantity of coal being got up—1200 tons per week. Seven and a half strokes of the ventilator per minute would produce that amount of air. The means of ventilation was by machinery. The diameter of each cylinder was 8 feet 6 in., with 6-feet stroke, and 8 strokes per minute would produce 51,000 feet of air. What they generally got was from 37,000 to 38,000. He never measured the strokes of the ventilator when he went down. Mr. Brough observed that he had done so minutely, and made it 48,858 feet per minute, and he enquired the cause of the difference of 11,000 or 12,000 feet. The witness replied that leakage in the masonry was the cause of the minor quantity of air realised compared with the actual calculation. The faces of the levels, headings, and stalls were bratticed sometimes within 6 yards, and sometimes within 4 yards. Lamps which went out were re-lighted at the slope, where only there were naked lights.

Mr. Lionel Brough had spoken to him of augmenting the ventilation by a supplementary furnace in the Hill Pit, but it could not be done, as the sides of the pit there were nearly run together; and in so small a pit the ventilator would have drawn the air down in spite of the fire. At one time he suggested a furnace at the bottom of the present upcast shaft; but the consulting viewer, Mr. Dobson, proposed a machine, as it would give more wind, and witness gave way, although he had seen no machine ventilation before. On the east side of the pit there were not more splits, as he did not consider them necessary; and it would not have been possible to put in crossings, on account of the bad top and bottom. Neither crossings nor air-bridges could have been put in there. Mr. Brough had spoken to him about restricting the workings on the east side, and the day of the explosion was to have been the last for working the first east district. That particular day was fixed upon because there were places in other parts of the pit in which to put the men. In every heading were two good wooden doors and two cloth doors; sheets between the double doors and cross-headings, and regularly framed doors in the stalls. The doors were opened and shut by boys (one of whom went with each haulier), and they did not depend upon self-closing doors. One of the rules specified that every person passing through a door should close it carefully after him. Since the erection of the ventilator, the largest quantity of air he had measured was 42,000 feet—that was before the explosion; subsequent to the explosion he had measured 43,000 ft. Before the erection of the ventilator there was a furnace at the bottom of the Hill Pit, and from 15,000 to 18,000 ft. were then given. The smallest portion of the slope was 59 ft. sectional area. The cross-headings were 6 ft. by 7 ft.; the levels the same; the wind-ways about the same; and the spout-holes 6 ft. by 4 ft. The dimensions were about the same as those in other collieries in South Wales. On the east side the coal was 8 ft. 6 in. thick, and in the west 6 ft. A new pit suggested by Mr. Brough, about 280 yards deep, would have been an improvement by coal being got in greater quantity and cheaper; and, doubtless, the ventilation would have been improved. Witness believed a blower of gas in the stall of a man named Sage caused the explosion, and that the pit was fired between the third and fourth east. No lamps had been found with the gauzes off, nor doors open. Thirty-three lamps were still missing. Four had been found unlocked in the first east level, but the gauze on, and undamaged. He entertained not the slightest doubt that the explosion resulted from an accident to a lamp, or by a naked light. One lamp had been found with a mandril hole in the gauze, in No. 4 cross-heading of No. 4 east level, near the body of Richard Jenkins, to whom it had belonged. He did not think one man was burnt to death, but about 80 by falls, from being crushed or shut in, and about 70 by after-damp. He never saw fire-damp in the old gobs. On the morning of the explosion there was not the least indication of danger, and he regarded the pit as safe as his own bed. He considered the ventilation sufficient to have met the blower. If the lamps had held good the men would have retreated, and the ventilation would have swept away the gas. He had never heard of blowers in the pit before, but he had twice seen an explosion. The air had to travel 3 miles on the east side. There were two splits and a scale. The scale had 3000 ft. of air going through it; the east side split had 22,000 ft., including that 3000 ft.; and the west side split better than 15,000 ft. The 3000 ft. had been carried in as a feeder, there having been a little gas there. He did not consider 3 miles a long distance for air to travel. There were 6-8ths or 7-8ths of an inch of water shown by the gauge in the pit. When the ventilation was but from 15,000 to 18,000 ft. by furnace, the workings were more extensive than now,—a larger face was exposed to view. The present machine, put up in consequence of Mr. Dobson, was intended to and did improve the ventilation double. It was erected in June, 1859, at considerable expense. In the best ventilated collieries explosions occurred, and no ventilation could be considered sufficient against the exposure of a naked light. The lamps in the Black Vein were carefully attended to. When the east workings were proposed to be cut off it was on account of the heavy expense incurred in getting coal. When things in the pit were necessary, and he named them, Mr. Phillpotts never refused. The witness positively denied that any complaints as to the pit being dangerous were ever made to him. A report was produced by Mr. Owen of Mr. Mackworth, the Government Inspector, in 1855, in which a number of grounds for the Risca Collieries being dangerous and defective were alleged. The witness was questioned upon these particulars. He said he had nothing to do with the pit then, but his answers went to show that the chief portion of the complaints had been remedied. His evidence was being taken when an adjournment took place.

To-day (Thursday) the examination of Mr. Harrison was resumed by Mr. Owen, and the witness, in the course of his answers, stated that all the doors in the pit were hanging doors, and that at every double door there was a spare canvas door. There was no leakage in the doors. The gas by which the explosion was caused, he believed, was 200 or 300 yards from an old gob. Risca was subject to blowers, and every precaution was taken to provide against them, both by safety-lamps and strong ventilation—ventilation so strong, indeed, that the men, instead of complaining, had often told him it was the strongest wind they had ever found in a pit. He accounted for the accident by supposing a blower of gas was suddenly fired by a lamp accidentally injured by a mandril, no gas being about, however, at that time. He never saw the Ogden safety-lamp, but he had seen one that would go out if an attempt were made to open it. He rather approved of Struvé's machine. He saw nothing unusual prior to the explosion, neither did he believe that blowers were preceded by indications. Mr. Brough said both Mr. Evans and himself were well acquainted with Ogden's lamp, and that the other mentioned by the witness was Waring's. The engineer, Mr. John Gray, was the succeeding witness: his examination was directed to the amount of air which might be produced by the ventilator. He said 48,500 ft. was generally produced per minute, but only between 37,000 and 38,000 ft. went into the workings, 11,000 ft. being lost, as he considered, by leakage, though he thought that the loss of 3000 ft. might be attributable to the rarefying of the air. With safety to the engine 65,141 ft. might be produced continuously, but Mr. Harrison never asked for more air; indeed, the opinion of the witness was that 81,427 feet would not overtax the machinery. The lamp-man, George Hemmens, deposed to giving out the lamps, but the practice appeared to be at direct variance with the colliery rules, and Mr. Harrison was called upon for an explanation, after which Mr. Brough expressed himself satisfied. Derrick, one of the firemen, deposed to examining the pit a few hours before the explosion, and finding all right. He had been partially examined when the inquest was again adjourned.

MINING ASSOCIATION OF GREAT BRITAIN.

The following report of the proceedings of the Mining Association of Great Britain during the past year has just been issued:—

The following subjects were brought before the association:—

Renewal of the Mines Inspection Act, Masters and Operatives Bill, Railway Clauses Consolidation Act Amendment Bill, Common Carriers Act Amendment Bill, Rating of Mines other than Coal Mines, Rating of Coal Mines, Repeal of London Coal Tax, Establishment of Mining Colleges and District Schools, Establishment or support of Newspaper or Periodical, Proceedings of Emigration Commissioners, resignation of honorary secretary, treasurer's accounts.

THE MINES INSPECTION BILL, which passed in the year 1855, expires in 1860. The Government brought in another Bill, founded on the reports of the Inspectors of Mines and Educational Commissioners, containing a great many objectionable clauses. A meeting of the Mining Association was held on Jan. 26, for the purpose of considering the Bill, after which time 12 other meetings were held from that date to the last meeting in August, occupying 21 days, when it was considered not necessary to trouble the members of the association by further attendance; the matter, now fully matured, being left in the hands of the president, secretary, and Mr. Parkes, Parliamentary agent. A very strong opposition was raised to the views of the association by Government, and a considerable section of the House of Commons, aided by delegates from some of the mining districts; and various other objectionable clauses were proposed by way of amendment in committee. During the progress of the Bill numerous interviews were had with the Home Secretary and members of Parliament, and many important alterations and amendments upon the bill agreed to; some of these, however, not being cordially supported by the Government in the Commons, decisions adverse to the interests of the trade were come to. On the Bill passing into the House of Lords an interview was obtained, through the kindness of Lord Ravensworth, with the Duke of Somerset (on behalf of the Government), Lord Stanley of Alderley, Lord Lonsdale, Lord Belhaven, the Earl of Airlie, and other peers, and Mr. Clive, when the obnoxious portions were discussed, and altered to the best form obtainable under the circumstances. Some of these alterations were again opposed in the Commons; but, with trifling exceptions, were eventually incorporated in the Bill. Taking into consideration the strong feeling exhibited by the opponents to the views of the association, the want of knowledge of practical details existing among numbers of the Commons, and the want of support from the Government, we hope that we may congratulate the association on the Act as it now stands, though it is not, in many respects, what we could have wished. The association proposed that provision should be introduced into the new "wage paying" general rule, that the wages of workmen should not be paid in any house licensed for the sale of intoxicating drinks. This was objected to by the so-called friends of the working classes; and, as the bill now stands, masters are prohibited from paying their workmen in any office "contiguous to any house where spirits, wine, beer, or other spirituous liquors are sold," while, as far as this Act extends, they may with impunity pay them in the public house itself. The previous two Mines Inspection Acts were passed for five years each; the present Act is made permanent.

MASTERS AND OPERATIVES BILL.—This Bill was introduced into the House of Commons in a very crude state by Mr. Macknnon, Mr. Ingham, and Mr. Slaney. A committee was appointed to receive evidence on the working of the Bill, and after hearing several workmen's delegates and others in support of the movement, they reported in favour of the Bill. It, unfortunately, stood for the third reading on the night that the Reform Bill was suddenly withdrawn, and from its impracticable nature, the members of the House who would have opposed it, thinking the house would not sanction it, were unprepared for opposition, and in the confusion which followed the withdrawal of the Reform Bill it inadvertently passed through the Commons. The Bill was taken charge of in the House of Lords by Lord St. Leonards, who altered and amended the various clauses. Through the effort of the association petitions were presented by the various districts praying a select committee, which had the desired effect. Their lordships agreed to hear evidence, but on consideration they found that from the important nature of the Bill, and the amount of evidence offered to be given before the committee, it was too late to re-open the question in the late period of the session, and reported accordingly. It will be necessary for the association to be prepared with evidence before the commencement of next session of Parliament, as a bill will, doubtless, be brought into the House of Commons containing Lord St. Leonards' amendments. An erroneous impression prevailed with the public that this Bill was purely permissive, and therefore innocuous, but this was an entire mistake.

RAILWAY CLAUSES CONSOLIDATION ACT AMENDMENT BILL—COMMON CARRIERS ACT AMENDMENT BILL.—These Bills were attempted to be introduced into Parliament by the Railway Directors' Association. The attention of the Mining Association was drawn to their dangerous tendency, and a strict watch kept upon the movements of the promoters. The Bills were withdrawn for the late session, doubtless to be presented again under less conspicuous titles.

LONDON COAL TAX.—This subject was brought before the association at their first meeting this year by the "Committee of Metropolitan and Suburban Manufactures for the Repeal of the London Coal Tax," and the following resolution was passed:—"That a memorial to the Government be drawn up and signed by the Chairman on behalf of the meeting, and that a deputation of coal owners be requested to wait on Sir George Cornewall Lewis, Home Secretary, to represent the injustice of the tax, its injurious effect on trade, and to pray for its entire removal." This was attended to, and every effort since made to abolish this iniquitous tax. It is believed that a large portion will be repealed next year, and the remainder at no great distance of time. The subject of rating of mines "other than coal mines;" rating of coal mines; establishment of a newspaper or periodical; and proceedings of the Emigration Commissioners have been allowed to stand over until next session, in consequence of the time of the association being so fully occupied with the Mines Inspection and Masters and Operatives Bills.

ESTABLISHMENT OF A MINING COLLEGE AND DISTRICT SCHOOLS.—The following resolutions were passed at a meeting of the association, held on Jan. 26 and 27 last, but have been allowed to stand over from the causes above mentioned:—1. That it is desirable that a mining and engineering college should be established in one of the mining districts of the kingdom, for the education of persons engaged in mining, engineering, and manufacturing operations.—2. That it is desirable, that in connexion with such college means should be adopted for training schoolmasters to teach in schools in the mining districts, with especial reference to mining and manufacturing employments.—3. That the proposition of the Durham University for furthering these purposes is deserving of support.—4. That a deputation be appointed to lay before the Government the proposal of the authorities of the University of Durham to apply a portion of their revenues to the above purposes, and to solicit the Government to pass a measure enabling that proposal to be carried into effect.

Mr. Day having intimated some time ago that in consequence of the large amount of

time required for the duties of honorary secretary, both in London and at home, he must resign that appointment at the end of the session, which he has done accordingly, after holding the office since the formation of the association, now upwards of six years. At the last meeting of the association it was unanimously resolved that the thanks of the association be given to Lord Ravensworth, and the members of the House of Lords, for their lordships' support to the Mines Inspection Bill; to the Hon. H. G. Liddell, M.P., and George Ridley, M.P., for taking charge of the Bill in the House of Commons, and to the other members who supported the views of the association; to Mr. Burns, of Glasgow, for his advice and assistance during the progress of the Bill; and that the thanks of the meeting be given to Mr. Day.

Mr. Wood having left the chair, it was taken by Mr. G. E. Heathcote, when the thanks of the meeting were given to Mr. Wood for presiding over the association, and for the attention he has given during the passing of the Bill.

The expense of printing, parliamentary agency, &c., has necessarily been great this year, owing to the protracted and unwarranted opposition of the Government and a section of the Commons. The accounts are being made up, and it will be necessary that a meeting should be held to examine and settle the same, and arrange for future operations. The proceedings of the last and former sessions of Parliament have demonstrated the importance, not to say absolute necessity, of some organisation, such as the present association, for the purpose of watching over and protecting the interests of the mine owners. Every session is producing measures calculated seriously to affect those interests, and demanding the most anxious scrutiny to prevent injurious enactments passing into law. Without doubt a full crop of these measures will make their appearance next session, including the Masters and Operatives Bill, and Railway Rates Bill; and unless the mine owners cordially concur in maintaining some means of combined action, the most serious consequences must follow. Anyone has but to compare the Mines Inspection Bill, as now passed, with the Bill as originally introduced, and additions proposed in committee, to see how very important the alterations obtained by the action of the association have been.

TRUTH'S ECHOES; OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market has continued inactive during the whole week, and the probability is that any great improvement must not be anticipated for a few weeks to come. But from appearances of the mines generally, and the several other auxiliaries necessary to the constitution of an active market exist, although dormant at present. The present inclement weather may be considered as a very great impediment to any progressive movement; and if this be the true cause, it certainly behoves buyers of mining shares to avail themselves of the present state of affairs, to secure that which must inevitably improve as the weather changes. The severe frost continues to retard the dressing department to a very considerable extent, whilst the heavy rain which fell on Dec. 29 and 30 has caused a great influx of water in most mines, and have completely submerged others to the exclusion of all underground operations. These misfortunes will, no doubt, preclude a great number of mines from keeping up their regular returns, and on the aggregate a large deficiency will be experienced for a time, especially in the tin mining districts. Most shares have had a downward tendency, arising from the scarcity of buyers; and although there does not appear to have been many forced sales, we may hope for an early reaction. SOUTH FRANCES, NORTH FRANCES, WHEAL SETON, and WEST DAMSEL shares have been enquired for. EAST BASSET, WHEAL BASSET, and WEST CARADON have been dealt in. NEW TRELEIGH, WENDRON CONSOLS, and NEW SETON shares have been in request at minimum market prices. STRAY PARK shares have experienced a considerable fall, and continue heavy at present rates. GREAT RETALLACK and HOLMBUSH, which maintain a fair demand, have since receded. NORTH DOWNS, EAST WHEAL RUSSELL, and KITTY (Lelant) are less firm, and shares more freely offered. WEST WENDRON, WHEAL CHARLOTTE, and KITTY (St. Agnes) have been in request, and several transactions have taken place. EAST CARADON, MARKE VALLEY, and SOUTH CARADON have been sought for, and the prices in the former have advanced. TRELAWNY, MARY ANN, LUDCOTT and HERODSFOOT shares have changed hands at market rates. TINCROFT, GREAT SOUTH TOLGUS, and ROSEWARNE AND HERLAND shares have been done at lower rates. GREAT WHEAL ALFRED and SORTRIDGE CONSOLS have fallen considerably, and shares remain heavy at present quotations. BRYN GWIOG and MERLLYN, flatter.

At EAST CARADON, the caunter lode at the 50 east is worth 20*l.* per fm., and west 25*l.* They have driven over about 85 fathoms of good orey ground, which speaks well for the next level; and although there are about 10 fms. more to drive before they will cut it at the 60, unless the ground materially improves it will occupy full three months, when there is no doubt the shares will considerably advance. The other productive points are without any alteration, and the present monthly samplings can be kept up for some time.——MARKE VALLEY continues to look remarkably well, without any material change in any of the productive places. The breakage which took place has been repaired, and the engine went to work last Sunday morning, consequently the mishap will have occasioned but little delay, and make no alteration in the samplings, which will be kept up.

HOLMBUSH is represented to look remarkably well at the 40 and 50, on the flap-jack lode. The stope in the bottom of the 40 is estimated at 10 tons per fm., and the winze at 7 tons. The 50 end is valued at upwards of 6 tons, whilst the other productive points are without any change.——At GREAT WHEAL MARTHA they have a very good discovery in the 40 east; the lode is upwards of 5 ft. wide, with a fine course of ore full 2 ft. wide, and the remaining portion saving work. Should this discovery be found to continue, a profitable mine may be calculated upon.

At GREAT TREGUNE, the lode in the 80 west continues as promising as for some time past; they are now about 3 fms. off from the junction, where a great change is fully expected; and from the numerous branches carrying copper ore, which are continually being intersected, there is very little doubt but the course of ore gone down from the 70 will be at the expected point large and permanent.

At CRELAKE the prospects are of a very imposing character, and there is every reason to calculate on a rich and permanent mine as the value of the lode increases in depth. The lode in the winze under the 50 is estimated at 24 tons, or 240*l.* per fm., being 10 ft. wide in the bottom. The lode at the 62, from whence a cross-cut is being driven, is not yet intersected, but the ground is beautifully mineralised, which augurs well for the object. The lode in the rise in the back of the 62 is worth 4 tons, and the eastern end 2 tons per fm. The sinking of the engine-shaft will be resumed on completion of tippiat, which probably by this time is done. There are two stopes in the back of the 40, one worth 2½ tons and the other 4 tons per fm. The cross-course, or lead lode, continues to contribute its usual amount of lead.

UNITED MINES (Tavistock).—It is gratifying to learn that some energy, as well as capital, is about to be employed in the development of this property. The manner in which it has been worked for two or three years past has not resulted in any profit to the shareholders, the committee having attempted to make it a self-supporting mine without sufficient ground laid open, taking away all that could be removed with as little loss as posible, and thereby crippling the resources which might become profitable if fairly developed. The call of 5*s.* just made, and a more efficient management, more than probably may bring the mine into a remunerative position.

At CALSTOCK CONSOLS, in the 118 east, they have driven the cross-course, and by the side of the lode for 2 fms., and purpose taking the lode down in a few days, when great results are anticipated from the highly favourable appearances which are presented. The lode in the winze under the 36, when last taken down, was 3 ft. wide, and worth fully 3 tons per fathom.——At OKEL TOR the discovery recently made in the 80 east continues to look remarkably well; the lode is 3 ft. wide, and yielding 6 tons of ore per fathom.——At WHEAL ARTHUR, in back of the 20, they have an improvement: the lode is producing some good work for tin, and the back of the adit has also improved for the same mineral. The old lode, in the 10 west, is producing some copper ore, yielding from 1 to 1½ ton per fathom.

HENDERSON'S PATENT CALCINING WORKS are about being erected in the western part of the parish of Calstock, for the purpose of extracting the silver and other metals from the burnt leavings of the arsenical works in this locality. Should the operations prove successful, it will be of great advantage to the mines of this district, which yield largely arsenical ores, containing silver, copper, tin, &c.

At NORTH BULLER much interest is expressed in the result of the present operations in the 100 cross-cut, as they have approached the capels of the lode at the point so long looked for, and although hard in its character, there is a large quantity of water issuing out at the end. A few days will determine the result of the intersection.

NEW TRELEIGH continues to look remarkably well, there being a fine lode in the 80. The 70 has been driven 40 fms. through a lode averaging from 20*l.* to 30*l.* per fathom, leaving excellent tribute ground, which can be taken away at a low price.

At EAST ROSEWARNE it was expected that they would commence forking the water on Wednesday last.——At NORTH DOLCOATH, WEST DOLCOATH, WEST TOLCARNE, and WHEAL NELSON, they have repaired the damages occasioned by the inundation referred to last week; and the mines being shallower are reported to be in fork, and operations resumed. My remarks of last week having met with some criticism in the locality of the late disaster, a well-known practical agent of the district considers that due precaution had not been taken, inasmuch that the requisite attention had not been paid to the adit, the falling in of which caused the overflow of water; for he states that the adit had been out of repair and in a dilapidated state for some months past, and was scarcely large enough to carry off the ordinary quantity of water discharged into it by the several mines in the locality. The heavy fall of rain which took place on the Saturday night caused the snow to disappear very rapidly, and this great accumulation soon filled the inefficient channel, whereby the weakest places gave way, where in that neighbourhood the adit is very shallow. It has, therefore, been suggested that, with a perfect knowledge of the ineffective state of the adit, by which so many mines reciprocated, had a man or two been constantly employed in keeping the same in repair, and charged to such mines that were mutually benefited by the adit, the probability is that the accident would not have occurred. But we frequently see a remedy for an evil after it has been sustained.

NEW WHEAL FRANCES is represented to be improving. The lode in the shaft is estimated at 50*l.* per fm., and the winze below the adit at 15*l.* per fm.; and the adit end is again improving, producing some good work for tin.——At WHEAL MOYLE the erection of the engine is rapidly progressing towards completion, and the surface operations are in a similar forward state, notwithstanding the inclemency of the weather retarding those works. As soon as the engine is at work, and underground workings commenced, the true position and prospects of the mine will be ascertained.

TRELOWETH is not looking so well as it did some few months since. The several ends are poorer, with a continuance of hard ground. Although most of the levels have fallen off in value, there is reason to hope that with a change of ground it will become a good productive mine.

At BRYNTAIL, the lode, which had fallen off in the 10, is reported to have again improved, and there is a good course of ore in the winze. JAMES LANE.

From Mr. EDWARD COOKE:—The weather still interferes with mining operations, consequently the returns will be considerably lessened for a few weeks. It is, therefore, not surprising that we should have to record a limited amount of business doing, and prices in several instances much lower; in fact, there are a few mines now selling very much below their intrinsic value, and in which there will be a great reaction again by-and-bye. The high price of money also militates against the mining as well as other markets. I am of opinion, however, that those who can afford conveniently to spare the capital would see a much larger profit in three months hence, by making a judicious selection of a few mines at the present depressed prices than by leaving it at interest at call at the various joint-stock banks. Among the mines that are most depressed I may instance GREAT RETALLACK. The frost certainly affects this mine as well as others; but there are not sufficient reasons for the shares receding from 42*s.* down to 35*s.* At the former price I presume no one at all conversant with mining property would pretend to say that Great Retallack is not one of the cheapest mines in the list. Whoever buys now cannot fail to make large profits on a favourable change taking place in the weather. The slight panic in TINCROFT shares, consequent upon the breakage alluded to last week, was of short duration. These shares have recovered to 6*l.*, and if they do not reach 7*l.* before midsummer I shall be rather surprised. TOLVADDEN, owing to the very heavy outlay, occasioned by the erection of machinery, &c., ceased for some time past to pay dividends; the time is not far distant, however, when dividends will be again resumed, and the mine become a popular investment. The working cost, and also that for the, at all times, heavy item in mining operations, timber, has been considerably reduced, without affecting the returns of ore. The price that this mine is now selling at will contrast very favourably with several that the public have allowed themselves to be deluded with for a long time past, which are selling at treble the price of Tolvaddeh shares. A few weeks may dispel the gloom that now hangs over the commercial world, when there will be a rush for all kinds of investments. In the meantime I would caution holders of mining property not to allow themselves to be unduly alarmed. Several years' experience has taught me that, next to the misfortune of buying in an inflated market, is the great evil of sacrificing stock, by pressing it for sale in a depressed one.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

ZINC IN IRELAND.—A correspondent, writing from Ireland, Jan. 10, says—"The only intelligence of any importance this week regarding mining is the great demand for General Mining for Ireland shares, which were done on Wednesday at 6, buyers. The directors are nearly ready now to commence operations on the great bed of calamine, having within the last two years driven and sunk 145 fms. This zinc ore will now absorb all attention of the directors. There is a present depth of it about 25 fms., in places 70 fms. wide, a building and machine erected for the purpose of dressing it, and the great point will be the cheapness of extraction. There are only 6000 shares, nearly everything paid for, and above 5000*l.* to the credit of the company. The similar mines in Belgium pay about 25 per cent. Several levels have been driven through the bed of calamine to the dressing-house, so that a continuous supply can be kept up when once the machinery is set to work."

The ROSEWARNE AND HERLAND MINES sold on Jan. 4 to Messrs. Dillwyn and Co. (computed) 6 cwts. of silver ore, at 465*l.* 7*s.* 6d. per ton; 1 ton at 177*l.* 6*s.* 6d.; and 1 ton 1 cwt. at 27*l.* 10*s.*; also to Messrs. R. Michell and Sons, 19 cwts. at 77*l.* 10*s.* per ton; at a cost of about 10*l.*; broken in the 30 fm. level, on the cross lode or cross-course, from 2 fms. 2 ft. of ground. The course of silver ore continues looking well; and it is expected a similar parcel will be sold at the end of this month. This parcel will leave a profit of above 400*l.* The mine is looking better in the 30 east. Some fine stones of yellow ore have been broken this week. The adit west is also improved, but the air is bad. The late rains have been against the men working.

From SILVER VEIN MINE (Jan. 7) Mr. F. Squire reports—The stack, a work of much labour, and one requiring the greatest care in the erection, is finished. To accomplish it I was obliged to employ all hands, and it is fortunate I did so, as the present severe frost, with deep snow, would otherwise have prevented me. A few days without frost would now finish the reduction-works in every part, but to proceed at present would be useless expenditure. I shall personally neglect no opportunity to proceed, being equally anxious as yourselves for their completion, that I may immediately commence operating on the large amount of ores now at grass, and to which we are daily adding. At the mine all is going on satisfactorily, although working under considerable difficulty from water and intense cold. The horse can hardly stand, although the whim is sheltered as much as practicable.

NEW SOUTH CARADON.—This mine is opening up under the most favourable auspices. The lode upon which they are driving is still good for tin, and increasing in size as it leaves the cross-course. This is a peculiarity of the district, and characterises its most productive lodes. The large pile of tinstuff already at the adit's mouth is an impressive index of what is to follow; the extensive area of its surface, its local situation, and numerous other advantages, including, amongst others, a sufficiency of water power for mining on a large scale, are such as to attract the attention and command the admiration of every practised eye. There is every probability, from present indications, that large quantities of tin will be returned before any machinery will be required, besides what may be necessary for dressing purposes. In this respect it appears destined to rival its great ancestor, the famous South Caradon, and in every other respect to render itself worthy its distinguished connection, and to bear its name.

WHEAL HEARLE.—In the report of last week the captain stated the shaft was set to six men and three boys, to sink 11 fms. for 12*l.*, as per bargain; and it is also stated the lode is 6 ft. long, worth 7*l.* 10*s.* per fm. It should have been the lode for 6 ft. long is worth 7*l.* 10*s.*, and as the shaft is 12 ft. long the lode is worth 15*l.* per fm. for that length. It will, therefore, be seen that this shaft, that cost 12*l.* to sink 11 fathoms, will produce 165*l.* worth of tin. I notice, also, that every point in the mine is working at a profit, excepting the 70 west, the 60 east, on the caunter, and the 50 cross-cut south. Why cannot similar bargains be made to sink a shaft in other mines—South Condurrow, for instance, where they are only 36 fms. from surface. Why do not they get on faster? Surely they spend money enough?

NANGILES MINE.—A company, on the Cost-book Principle, has been formed to work these mines. The shares (1024) have been all applied for and taken up by most respectable parties. A meeting was held on Monday, when a call of 3*l.* per share was made; and a committee, consisting of Messrs. Wm. Williams (of Tregullow), J. S. Bickford (of Tuckingmill), and Richd. Lanyon (of Kennal Vale), appointed to act with the purser (Mr. Hollow, of Lelant).

GREAT CARADON AND SLADE.—A special general meeting of this association is summoned for Jan. 21, to be held at Amery's Hotel, Bath, "To take into consideration what measures are to be adopted, in consequence of a notice having been served upon the directors by the mortgagees demanding payment of the principal and interest due to them, within one month from the 9th day of January last; also to consider the pressing liabilities of the company; also to consider the desirability of placing the mine on the Cost-book Principle; and to pass resolutions thereon." A correspondent at Bath draws our attention to the peculiarity of the proceeding, and implies that it is the desire of two or three large shareholders to break up the enterprise, who, with this view, have been instrumental in inducing the mortgagees to proceed in this rather summary manner. This impression is the more confirmed, he writes, from the fact that the mortgage is under 900*l.*, and the debts due for calls from shareholders to the company are about 2000*l.*, which, of course, are easy to be recovered under the Limited Liability Act, by which the proprietary of this company are bound together. Our correspondent, therefore, urges a full attendance of shareholders, and requests that those who cannot be present personally should forward proxies, taking care into whose hand they are entrusted, as a strong party, he asserts, seek the dissolution of the company for their own benefit, while the smaller holders generally consider they possess a valuable mineral property, and desire to test its capabilities fully.

The Colliery and Ore Mine Inspection and Truck Acts. By THOMAS TAPPING, Esq., Barrister-at-Law. Published by Stevens and Norton, Bell-yard, Lincoln's Inn, London.

This work is an exposition of the statutes (5 and 6 Victoria, cap. 99, and 23 and 24 Victoria, cap. 151) passed for the regulation of ore mines, collieries, and iron-stone mines, and is intended to be, as it really is, a practical guide for official Inspectors, owners, viewers, captains, managers, and agents, with especial reference to governmental inspection, and the employment of mine labour under the above statutes. It also comprises a notice of the Truck Act (1 and 2 Will. 4, cap. 37), and a very carefully-prepared form of pit-bond. There are copious and valuable notes upon every important or difficult passage, many legal decisions affecting the same, an appendix of the above statutes, and, lastly, a full index to the whole. Any work upon these matters, proceeding from the pen of so high an authority as Mr. Tapping, is deserving of attention, especially of all those connected with mines and minerals. It is not a very difficult task to write a bad book, nor is it an easy matter to write a good one. The two works may externally be pretty much the same—the advantage may possibly be with the bad one, their real merit is only ascertained by perusing them; but as readers have to buy the book before consulting it, the next best test to ascertain whether the work is worth buying or not is simply to see who the author is. If he be a man who has stood before the world, and is acknowledged by it as one competent to express his opinion upon the subject, the book may safely be bought, and confidently consulted. Applying these remarks to the above work, we feel that we are only echoing public opinion when we say that Mr. Tapping, as one of the best authorities in mining law, has produced a very useful treatise, and that his great experience in these matters renders him competent to give legal advice worth following. The frightful loss of life continually occurring in coal and other mines has rendered it imperative upon the Legislature to make some statutory provisions with a view to its prevention, or, at any rate, of its diminution. The reports of the Government Inspectors show, as stated by Mr. Tapping in his interesting preface, a yearly mortality of colliers from mine accidents alone of nearly 1000. Apart from the injury which the families of the deceased colliers receive by the bereavement, society also suffers to a great extent, although not immediately perceptible: 1000 of its most industrious and useful members swept into eternity every year is no trifling loss. Mr. Tapping may well say that though *their deaths are casualties, their lives are miracles.* Anything like Government interference in trading or other concerns is generally looked upon with dislike, yet every humane and sensible man must admit that some sort of supervision and control is necessary, especially in coal mines, where the danger is so great, and the loss of life so frequent, and such supervision and control had better remain in the hands of the Government than of private individuals. The pit-bond alluded to by Mr. Tapping may, he thinks, be made a sort of private means of checking accidents. Each collier is to be bound for the conduct of his fellow-workman in reference to the infringement of the colliery rules. The majority of deaths arise from gross negligence, and the delinquents generally are killed; the survivors should then pay the penalties. It is true that by this mode the innocent are frequently made to suffer for the guilty, but then it will operate effectually as a check to negligence, for a negligent workman will be called to account by his fellow-workmen, and prevented by them from acting negligently, in order that they may not be rendered liable to the penalty arising from an accident consequent upon such neglect. We know that colliers will run the risk of losing their lives by allowing their fellow-workman near them to open his safety-lamp, &c., but let them once know that all of them will be fined for every accident, and then, for the sake of their breeches' pocket, they will keep a very sharp look-out upon each other. The safety of all is to be gained by making them responsible for each other. They are their own police. The Truck Act is embodied in this treatise, because it applies, amongst others, to workmen employed in quarries, mines, collieries, and the various occupations incident thereto. Thus we have by the Inspection Acts the mode in which the mine labour is directed, and by the Truck Act the mode in which it is to be paid. We confidently recommend this little work to our readers as an excellent manual, which ought to be in the hands of every one connected by occupation with ore mines and collieries.

THE RAILROADS AND CANALS OF THE UNITED STATES.—Although it was well known that the railroad system had been extended more, perhaps, in the United States than in any other country, it takes one by surprise to find that the "History of the Railroads and Canals of the United States of America, exhibiting their progress, cost, revenues, expenditures, and present condition," requires three closely-printed volumes—three volumes equal in size to the new edition of Dr. Ure's "Dictionary of Arts, Manufactures, and Mines"—to contain it. The facts recorded are of course principally of a statistical nature; there will, consequently, be little difficulty in judging how indefatigable must have been the labours of the man who should accomplish so Herculean a task. The labor to be performed, however, has not prevented the work being undertaken, and Mr. H. V. Poor, the editor of the *American Railroad Journal*, has already completed and issued the first volume, which embraces the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, and the district of Columbia, and gives the organisation and present financial condition of each company; the date of its charter, and also of the commencent and completion of the work of construction, and every fact of importance as affecting the value of the securities issued, or of historical interest; the line of road; the equipment in use; the different classes of share capital, and of the funded debts; the dates at which the latter were issued and are made payable; the nature of the security pledged for them; the rates of interest paid, and the dates and places at which both principal and interest are payable. Annexed to each sketch is a statement showing the amount of capital invested yearly; the length of line in operation; the receipts from the various sources of revenue; current expenses; net earnings, and amount and rates of dividends paid from the opening of the road. A summary of the total result of all the roads in each State for each year, as well as for the whole period covered, is given. The work is, in fact, a full and complete history of each enterprise from its organisation to the present time. The details given in the work are elucidated by two beautifully-executed maps upon a large scale, and showing the various stations upon the several roads. The entire work will be illustrated by seven maps—one a general map of the United States and six of the different sections—and, doubtless, Mr. Poor's history will, when completed, secure for itself a reputation unsurpassed by any work upon railways in any country of the world.

WEEKLY LIST OF NEW PATENTS.

GRANTS OF PROVISIONAL PROTECTION FOR SIX MONTHS.—C. L. HANCOCK, Pentonville: Improved fuel.—J. BRINKLEY, Carrickfergus: Furnaces for consuming or preventing the emission of smoke.—Capt. F. J. CHERT, Paris: furnaces for consuming smoke.—C. BINKS, Parliament-street, Westminster: Gases applicable in generating heat and light, and in bleaching.

OBTAINING MOTIVE-POWER.—An invention has been provisionally specified by Mr. SAX, of Paris, which consists in obtaining motive-power by weights and springs for imparting motion to vehicles or machinery. The weights are made to bear upon three or more standards, gliding in suitable bosses, fixed to the frame of the vehicle, or of the parts to be moved. The lower end of each of these standards is curved and jointed to a lever-arm, the end of which is likewise connected by a joint to a spring working in the side of the standard opposite to the said lever-arm, whilst towards this said end a projecting bolt for a friction roller to revolve on is fixed therein, which friction roller glides over a projecting rim fixed against and all round the side of the corresponding wheel of the vehicle—a repetition of the same arrangement acting on each of the wheels of the vehicle, or of the mechanism to which the said wheels are to impart motion. This arrangement, of course, admits of various modifications in detail, to which it is unnecessary to refer.

NEW PAPER PROCESS.—Messrs. Obert Vasseur and Houbigant have recently patented in this country as a communication to Mr. Henry, patent agent Fleet-street, a process in which vegetable substances are reduced to paper pulp, and in the course of being so reduced the various other useful matters which they contain are extracted from them, such as fibres, oils, fecula, tannin, gums, and colouring matters, which are extracted in such condition that they may be turned to commercial account. For this purpose the vegetable substances after being passed down a set of bruising rollers are steeped in a lye, resulting from the ensuing operations, and after the steeping are subjected to distillation (if worth while), and then to the action of heat or steam in a close boiler. During the operations, the plants are stripped, stirred, or worked about, combed or drawn out, &c.; they are finally bleached when in a state of pulp, which they attain after parting with their longer filaments, which are available for fibrous and textile manufacturing purposes.

NEW FERRUGINOUS ALLOY.—A novel but feasible method of producing cheap steel has been patented in this country for Messrs. Noel and Co., of Paris; it consists simply in mixing together pig-iron and wrought-iron in varying proportions, according to the nature of each and the quality of steel desired. They prefer to employ bar-iron worth about 8*l.* per ton, and pig-iron worth 3*l.*; and 15 per cent. of pig gives a good soft quality steel, 25 per cent. a medium quality, and so on.

The New South Wales Government have ordered, through the Board of Trade, a supply of tram-rails and two cars from Mr. G. F. Train, for a horse-railway to connect the railway at Sydney with the docks.

The contractors for the new bronze coinage are Messrs. Boulton and Watt, of the Soho Mint, at Birmingham, where the work is carried on. The total quantity to be made by them in the course of the next 2½ years is stated to amount to 1800 tons—a speed which involves the striking of 400,000 pieces per day on an average during the whole time.

EFFECT OF THE FROST ON IRON.—A somewhat remarkable accident has occurred at the Chatham station of the London, Chatham, and Dover Railway, which illustrates in a singular manner the astonishing effects the present severe frost has upon metals, and may serve to elucidate the mystery which attaches to the cause of several of the dreadful railway accidents which have occurred during the present severe weather. A few nights since Keeley, one of the signal-men employed at the station, was in the act of moving the large and powerful iron lever which works the distance signal at the entrance to the tunnel, when on attempting to lift the bar the lever snappped in two, similar, as the signalman described it, to the breaking of a tobacco-pipe. What makes the accident the more astonishing is that the bar was of wrought-iron, and no less than 2½ in. in thickness, whilst its weight was only a few pounds less than 1 cwt. The point at which the fracture occurred shows the iron to be of very good quality, and no indication of a flaw can be detected.

MINING AND SMELTING GLOSSARY.—Now ready, price 2*s.*, a NEW EDITION, enlarged, of THE ENGLISH AND FOREIGN MINING GLOSSARY; to which is added the SMELTING TERMS used in France, Spain, and Germany. Published at the *Mining Journal* office, 26, Fleet-street, and may be obtained through all booksellers and newsmen.

GOVERNMENT INSPECTION OF COAL MINES.—Now ready, price 6d. the Government Inspection of Coal Mines, to which is appended the Act for the Regulation and Inspection of Mines, which will come into operation on January 1, 1861.

IRON MANUFACTURE.—All interested in the make or use of iron should read Mr. Rogers's new work on *Iron Metallurgy*:—

"I do not hesitate to say Mr. Rogers's work is the most complete combination of sound science and sound practice that has yet appeared on Iron—beyond comparison."—DAVID MUSHET.—Published at the *Mining Journal* office, 26, Fleet-street, price 25*s.*

TO MINING PROMOTERS AND SECRETARIES.—The advertiser, a GENTLEMAN of CONSIDERABLE EXPERIENCE in the SECRETARIAL DUTIES of MINING and OTHER COMPANIES, and holding high testimonials, SEEKS an ENGAGEMENT.—Address, "J. S.," *Mining Journal* office, 26, Fleet-street, London, E.C.

TO MINING CAPITALISTS.—Those inclined to invest in an unusually cheap and safe property may have full particulars on application to "S.," 14, Union-street, Plymouth.

TO PARENTS AND GUARDIANS.—A CIVIL ENGINEER, ARCHITECT, AND LAND SURVEYOR, who is in extensive practice, has a VACANCY for an IN-DOOR ARTICLED PUPIL.—Apply by letter, addressed to "X. Y., C.E.," Mr. William Standing, Bourn Valley Pottery, Nine Elms, London, S.

MANAGING AGENT.—WANTED, a SUPERIOR PRACTICAL AGENT, who has had considerable experience among the Welsh lead mines, to TAKE the GENERAL MANAGEMENT and SUPERINTENDENCE of SEVERAL MINES in CARDIGANSHIRE.—Address, with references, testimonials, and terms, J. H. MURCHISON, 117, Bishopsgate-street Within, London, E.C.

WANTED, an UNDERGROUND AGENT for WHEAL POLMEAR MINE. He must have been brought up as a tributer in copper mines, and have been employed as an agent, if in some extensive copper mines will be preferred.—Applications, with testimonials, to be made to Capt. Dalley, of St. Austell. January 1, 1861.

WANTED, a good WORKING ENGINEER to TAKE CHARGE of STEAM ENGINES and MACHINERY in a MINE in CUBA.—Apply to HARVEY and Co., Hayle Foundry, Cornwall.

A FEW respectable DISTRICT AGENTS WANTED for a MANURE which is highly recommended, and sold carriage free. Liberal terms given.—Address, with occupation and references, "B. C.," No. 10, Pall Mall East, London, S.W.

IRON PYRITES, OR SULPHUR ORE, WANTED TO PURCHASE.—Apply by letter only, to Box 59, Post-office, Birmingham.

MR. R. H. M. JACKMAN, MINING AND SHAREBROKER, 2, ADAM'S COURT, OLD BROAD STREET, TRANSACTS BUSINESS in EVERY DESCRIPTION of SHARES, at closest prices nett, or on commission, but not being a dealer buys and sells only on orders confided to him.

SHARES FOR SALE, free of any commission:—

2 Margaret, £52.	5 Rosewall Hill, £3¼.	4 Wendron, £24¼, x d.
20 Wheal Moyle, 32*s.* 6d.	5 Garlidna, £4.	10 So. Carn Brea, £3¼.
1 Rosewarne Utd., £27½.	1 East Basset, £117.	30 Camborn Vean, £4.
50 New Frances, 9*s.* 9d.	10 Pendeen, £5¾.	100 So. Condurrow, 19*s.* 3d.
2 North Treskerby, £33.	50 Lady Eliza, 7*s.* 6d.	10 Gt. So. Tolgus, £8 6*s.* 3d

Jan. 11, 1861. Bankers: London and Westminster.

MR. J. HUME, 74, OLD BROAD STREET, LONDON, has FOR SALE:—

50 Great Retallack, 33*s.* 6d.	10 Uny, £4¼.	5 East Caradon, £12.
20 Lady Bertha, 32*s.*	20 Gurlyn, 10*s.* 6d.	10 North Robert, 27*s.* 6d.
50 Sortridge, 15*s.*	20 Great Alfred, 14*s.*.	1 Buller, £135.
	20 Edward, 40*s.*	1 West Caradon, £79.

The "MINING SHARE MONITOR" for January is just out. Subscription, 5*s.* per annum; single copy, 6d.

Bankers: London Joint-Stock Bank.

MR JOSEPH GREGORY, MINING OFFICES, 1, BANK CHAMBERS, LOTHBURY, E.C. BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES. Terms, 1¼ per cent. on £100 and above, 2½ per cent. on smaller sums. Bankers: City Bank, Threadneedle-street.

CHARLES LEE AND CO., MINE SHAREDEALERS AND BROKERS, CHESTER. SHARES ON SALE in the several following mines, in North Wales, viz.:—South Pant-y-Gof, Kilmorey, South Kilmorey, and others.—Apply at the office, 20, Newgate-street, Chester.

N.B.—Mines inspected, and impartial reports given.

WILLIAM BURNS, HYDRAULIC AND GAS ENGINEER, ARCHITECT, AND LAND SURVEYOR, ELY, CAMBRIDGESHIRE.

MESSRS. THOMAS PENROSE and THOMAS PRICE UNDERTAKE ASSAYS and ANALYSES of EVERY DESCRIPTION of MINERAL PRODUCT, FUEL, and MANURES, at Messrs. Richardson and Co.'s Assay Office and Laboratory, Copper Ore Wharves, Swansea.

CHARLES DAVEY AND CO., SAFETY FUSE MANUFACTURERS. ST. HELEN'S JUNCTION, LANCASHIRE.

THE MIDLAND IRON COMPANY, ROTHERHAM, MANUFACTURERS of BEST "YORKSHIRE," and of STEEL IRON TYRE BARS, for LOCOMOTIVE ENGINE, CARRIAGE, and WAGON WHEELS. Also of REFINED, SCRAP, STEEL IRON and "YORKSHIRE" BARS, HOOPS, RAILS ANGLE IRON, MALLEABLE SHAFTS, AXLES and FORGINGS.

Board of Trade.

TO SHIPWRIGHTS AND ENGINEERS.—Notice is hereby given, that the BOARD OF TRADE are ABOUT to APPOINT an ENGINEER and a SHIPWRIGHT SURVEYOR of STEAM VESSELS, under the Merchant Shipping Act, 1854, for the TYNE and SURROUNDING DISTRICTS, and are PREPARED to RECEIVE APPLICATIONS.

Particulars may be learnt on application at the Board of Trade. The applicants will be examined as to their competency.

Applications for these appointments should be sent on or before the 1st February, 1861, addressed to the Secretary, Marine Department, Board of Trade, accompanied by testimonials of competency and character.

Board of Trade, Whitehall, December 26, 1860.

THE CWM AFON COPPER MINING COMPANY (LIMITED).

OFFICES.

WASHINGTON BUILDINGS, BRUNSWICK STREET, LIVERPOOL.

ISSUE OF PREFERENCE SHARES.

This company was formed in June, 1859, for the purpose of working a copper mine situate in the parish of Festiniog, in the county of Merioneth.

The capital was nominally fixed at £7000, but shares of £1 each, representing £1322, only were subscribed, so that the funds available for testing and properly working the mine were comparatively insignificant, particularly after legal and preliminary expenses had been liquidated. The operations of the company were furthermore contracted in consequence of the absolute refusal of a portion of the shareholders to pay up even the first and second calls, so that the works at the mine were brought to an abrupt standstill for nearly six months, and this, too, during the most favourable period of the year.

It is true that the expectations of a section of sanguine shareholders had been raised to an extravagant degree by exaggerated reports as to the positive certainty of the mine instantly yielding an extraordinary quantity of ore; but upon the heels of the sudden disappointment of these expectations, it is equally true that reports as highly exaggerated were circulated depreciatory of the undertaking; and the company, divided within itself, was not very likely to work with that spirit of unanimity which the successful carrying out of mining operations imperatively calls for and demands.

The formation of a new board, possessing much of the elements of the former one, and the appointment of an efficient manager of the works gave to the undertaking fresh, but, at the same time, very slight animation, so that after a few months' operations the directors find that the small subscribed capital is entirely absorbed. Being earnest in the desire to carry on the mine, they have resolved to issue preference shares, and have deemed it expedient to publish this statement, which is the first issued by the company.

The directors do not invite co-operation in carrying on the works by holding out high hopes of great success; they wish simply to state that they consider the mine well worthy of further trial, and to enable them to raise capital for this purpose, they merely invite those who may wish to join them in the undertaking to take up preference shares, so as to carry out the contemplated operations, which can be done with trifling outlay.

The preference shares will bear a dividend interest of 25 per cent.

Further information and forms of application can be obtained by applying at the offices of the company.

By order of the Board,
HY. DUDLEY COOPER, Secretary.

WHEAL CONQUER.—ALL PERSONS having ANY CLAIM upon the above company ARE DESIRED to SEND PARTICULARS of the same to the undersigned for discharge.

THOMAS SPARGO, Purser.
Offices, 224 and 225, Gresham House, Old Broad-street, London, E.C.

NORTH WHEAL PROVIDENCE.—ALL PERSONS having ANY CLAIM upon the above company are DESIRED to SEND PARTICULARS of same to the undersigned for discharge.

THOMAS SPARGO, Purser.
Offices, 224 and 225, Gresham House, Old Broad-street, London, E.C.

THE PATENT ATMOSPHERIC MARINE SALVAGE COMPANY (LIMITED).

Capital £20,000, in 20,000 shares of £1 each. Deposit 2s. per share, and a call of 3s. in twenty-one days.

Future calls 5s. per share, at intervals of two months.

Rainbird's invention for raising sunken ships has been exhibited to some of our most eminent engineers, whose opinions and testimonials establish its practicability beyond doubt. Upon careful analysis, it is estimated that upwards of 100 per cent. per annum will be realised, the amount of property lost by sunken vessels on the British coast alone averaging upwards of £3000 per day! Usual remuneration—half the value recovered.

Early applications for the remaining shares will be received at the Union Bank of Manchester, York-street; or at the offices, where prospectuses, &c., can be had, and the model seen in operation. The directors are now prepared to receive tenders.

40, Brown-street, Manchester. JOHN COWLE, Manager.

CAPT. PRINCE, M.E., CAMBORNE (late of Redruth), having, by the solicitations of his friends, removed to this town, where he has taken suitable offices, begs to inform the mining public and capitalists generally that he has made arrangements to INSPECT and REPORT on MINES and MINING PROPERTY in Great Britain, Ireland, and the European Continent, &c., and flatters himself that, from the experience acquired by the numerous engagements he has had in the management and inspection of copper, tin, lead, silver, iron, manganese, nickel and cobalt, and antimony mines, at home and abroad, he is competent to give advice to his friends on all mining matters, and that those who may favour him with their patronage will be as well satisfied as other gentlemen who have been guided by his recommendations in investing their capital in good mining speculations, or withdrawing their interest from mines in which no good results were likely to be obtained.

J. PRINCE will VALUE, and BUY and SELL MINING PROPERTY, including SHARES, of EVERY DESCRIPTION. He will also assay all ores, minerals, or metals of commerce, and test any kind of ores, minerals, or alloys sent to him, and thus afford facilities to mine agents and others holding mining property for ascertaining the existence, or otherwise, of valuable minerals in those mines in which they may be interested.

J. PRINCE has his son, N. VIVIAN PRINCE, will SURVEY MINES, and ENSURE CORRECT PLANS and SECTIONS of the WORKINGS being made.

Mining Office, Camborne, December 28, 1860.

MR. BIRDSEY, MINING BROKER, ST. MICHAEL'S HOUSE, ST. MICHAEL'S ALLEY, CORNHILL, in returning thanks to his numerous friends who have patronised him for the past 32 years, begs to assure the public that he is always in a position to TRANSACT MINING BUSINESS at the closest market prices; and from his long experience of the districts of Cornwall, Devon, &c., is able to name some six or eight mines in which there will, in all probability, be a great advance of price in a very short period.

MESSRS. R. HORLEY AND CO., SWORN STOCK, SHARE, and MINING BROKERS, 45, CORNHILL, E.C. (late to of 2, Royal Exchange-buildings), continue to TRANSACT EVERY DESCRIPTION OF MINING BUSINESS, and are in a position to obtain reliable information respecting all dividend and progressive mines.

N.B.—Messrs. HORLEY and Co. publish a Weekly Mining List, with the closing prices, every Wednesday, and will be most happy to forward the same (gratis) on application.

MINING OFFICES, 5, BARGE YARD, BUCKLERSBURY, E.C.

MESSRS. BRUNTON AND CO. beg to CALL the ATTENTION of INVESTORS to the LARGE RETURN which may be REALISED from well-chosen INVESTMENTS in MINING SHARES. Messrs. BRUNTON and Co. can refer with satisfaction to the several undertakings of this nature which they have within the last few years introduced to public notice. They are all in a prosperous condition, and the shares in most of them, from the discoveries made and their intrinsic merits, command at present a good, and in one or two instances a large, premium. Dividends in some of them are at hand, and others promise shortly to follow.

Information obtained, and advice given to enable capitalists to realise the utmost advantages from their investments.

SECURE INVESTMENTS.—Capitalists will find British Mines pay the largest profit of all known securities. To invest £1000 in Consols, railway debentures, or bank shares, the largest amount receivable is £60 per annum, whereas the former yields an income of at least £150. Progressive Mines, judiciously selected, frequently advance from 100 to 500 per cent., and free from risk.

MESSRS. FULLER AND CO., 8, MOORGATE STREET, LONDON, are in daily communication with agents of the principal mines in the kingdom, and are in a position to advise as to the merits of each class of property.

BANKS, RAILWAYS, INSURANCE, and every description of Stock Exchange business transacted. Telegraph messages promptly attended to.

A few SHARES FOR SALE in Dolcoath United and West South Caradon.

BRITISH AND FOREIGN INVESTMENT.—MR. THOS. SPARGO, of Nos. 224 and 225, Gresham House, Old Broad-street, London, E.C., TRANSACTS every description of BUSINESS in the PURCHASE and SALE of SHARES in BANKS, CANALS, RAILWAYS, BRIDGES, INSURANCES, and all other BRITISH and FOREIGN STOCK.

Mr. SPARGO has FOR SALE SHARES in ENGLISH MINES paying from 20 to 25 per cent. upon the present price in bi-monthly and quarterly Dividends, as also a number of shares in good Progressive Mines, some of which he specially recommends to the public as sound investments.

Mr. SPARGO GIVES ADVICE and ACCURATE INFORMATION as to position and prospects of all mining undertakings upon application, either personally or by letter, and has published the following, from which those unacquainted with mining can enlighten themselves thereon, viz.:—Statistics and Observations upon the Mines of Devon and Cornwall, for 1859, price 2s. 6d.; ditto for 1860, 2s. 6d.; Physical, Geological, and Parish Map of Cornwall, 10s. 6d.; Geological Maps of various Mining Districts of Cornwall, showing boundary lines of every mine, with the lodes, cross-courses, and elvans traversing each, 2s. 6d. each; and a Relief Model Map of Cornwall, price £5 5s.

Dividends received, calls paid, and all orders negociated on a commission of 2½ per cent.

FIFTEEN to TWENTY, and even TWENTY-FIVE PER CENT. PER ANNUM upon current value of shares, in CORNISH TIN and COPPER MINES.

Dividends payable two-monthly or quarterly.

MESSRS. TREDINNICK AND CO., MINING ENGINEERS, SEND their SELECTED LIST OF SOUND PROGRESSIVE AND DIVIDEND SHARES upon the receipt of a Fee of One Guinea.

Review of Cornish and Devon Mining Enterprise, 5s. per copy.

Maps per post of the Buller and Basset, Great Vor, Alfred Consols, the Providence and Margaret Districts, 2s. 6d. each.

Cornish Mines, well selected, pay better than any other description of securities, are freer from risks, and entail less responsibilities than banks and other joint-stock companies. Shares bought and sold on commission of 2½ per cent.

Money advanced at 10 per cent. annually, for short or long periods, upon approved Mining Shares.—78, Lombard-street, London, E.C.

IMPORTANT TO TELEGRAPH COMPANIES AND OTHERS.—HALL AND WELLS, patentees, are PREPARED to INSULATE CONDUCTORS of ALL SIZES with PURE INDIA RUBBER for submarine cables, or any other purpose where insulation is required for telegraphic communication. ALL CORES are WARRANTED to STAND the USUAL TEST for INSULATION, &c. Specimens and prices of cables and cores can be had at their works, Steam Mills, Mansfield-street, Borough-road, Southwark, S.E.

Miners' Association of Cornwall and Devonshire.

WITH the NEW YEAR the MINERS' ASSOCIATION fairly enters on its work.

FOUR CLASSES are FORMED in FOUR IMPORTANT MINING LOCALITIES. SIX EXTENSIVE MINERAL DISTRICTS are ORGANISING CLASSES. EACH ONE APPLIES for the SERVICES of the LECTURER on CHEMISTRY and MINERALOGY at the earliest possible period.

This is a sufficient answer to all those persons who have doubted the desire of the miner to increase his knowledge.

It is important that the Association should, at the general meeting, be enabled to APPOINT a SECOND LECTURER and TEACHER.

To do this, to carry home to the miner the practical knowledge for which he craves, an income of not less than £500 per annum must be secured.

With the New Year subscriptions commence, and from all concerned subscriptions or donations are solicited, in the confident hope that every one will benefit by the operations of an association established for the improvement of one of the most important industries of the country.

Subscriptions or donations may also be paid to Mr. RICHARD PEARCE, assistant secretary, Royal Institution, Truro; Mr. R. Q. COUCH, local honorary secretary, Penzance; Mr. ALMOND E. PAULL, local honorary secretary, Camborne; Mr. W. POLWINGHORNE, local honorary secretary, Tywardreath; Mr. MATTHEW LOAM, local honorary secretary, Liskeard.

ROBERT HUNT, F.R.S. (Keeper of Mining Records), General Honorary Secretary.

Museum of Practical Geology, Jermyn-street, London, S.W., Jan. 1, 1861.

GEOLOGY—KING'S COLLEGE, LONDON.—PROF. TENNANT, F.G.S., WILL COMMENCE a COURSE of LECTURES on GEOLOGY, on FRIDAY morning, January 25th, at Nine o'clock. They will be continued on each succeeding Wednesday and Friday, at the same hour. Fee, £2 12s. 6d.

R. W. JELF, D.D., Principal.

LOANS ON DEBENTURE BONDS.—The Directors of the SOUTH STAFFORDSHIRE WATER WORKS COMPANY are PREPARED to RECEIVE TENDERS for LOANS on DEBENTURE BONDS, to pay off those falling due. Proposals, stating amount, rate of interest, and period for which offered, to be addressed to the secretary of the company, at their offices, Bridgman-place, Walsall.

Walsall, November 6, 1860. J. CHURCHILL, Sec.

EAST INDIA COAL COMPANY (LIMITED)—ENGINEER AND MINER WANTED.—The company are DESIROUS of ENGAGING the SERVICES of an EXPERIENCED PRACTICAL ENGINEER, to superintend and undertake the working and repairing of engines. A good knowledge of coal mining will also be desirable. Candidates who may consider themselves eligible for the situation are requested to forward applications, addressed to the secretary of the company, accompanied by their testimonials, and a statement of the amount of salary required, on or before the 22d inst., and the successful candidate will be required to proceed to India forthwith.

By order, HENRY HAYMEN, Chairman.
W. H. SIMPSON, Sec.

Nos. 222 and 223, Gresham House, Old Broad-street, January 9, 1861.

REFERRING to our Circular, as also that of Mr. Fothergill, of March last, announcing that we had succeeded to the business so long carried on by Mr. Fothergill, in Manchester, as consulting engineer, &c., relinquished by him consequent on having accepted a Government appointment in London, we have now much pleasure in stating that Mr. Fothergill having resigned the appointment referred to, a PARTNERSHIP has been arranged between us, and the business will in future be carried on with increased facilities in London and Manchester, under the style or firm of FOTHERGILL, WRIGLEY, AND SMITH. WRIGLEY AND SMITH.

LONDON OFFICES,—27, LAURENCE POUNTNEY LANE, CANNON STREET.
MANCHESTER OFFICES,—17, QUEEN'S CHAMBERS, 5, MARKET STREET.

UN NEGOCIANT FERRONNIER, ayant un debit très étendu, DESIRE ENTRER en RELATION avec des FABRICANTS en FER DE FONTE, en TOLES, en BARRES, et en toutes sortes de quincailleries, pour leur SERVIR D'AGENT, ou pour recevoir leurs fabricats en depôt, étant a même de donner une caution convenable.—S'Addresser, par lettres affranchies en langue Française ou Hollandaise, avec indication distinct des prix et des conditions, sous les initials "A. B.," à Monsieur C. N. Teulings, à Bois-le-Duc, Holland.

BARRAVORE SILVER-LEAD MINING COMPANY (LIMITED).—The ORDINARY HALF-YEARLY MEETING of this company will be held on MONDAY, the 14th January, 1861, at the company's office, 33, Upper Sackville-street, Dublin, at the hour of One o'clock, for the purpose of receiving the directors' report, and a statement of accounts up to the 1st November, 1860, and for the election of directors in the room of those who may retire, also for the appointment of an auditor for the ensuing year, and for other general business of the company.

33, Upper Sackville-street, Dublin. By order.

THE CASARA LEAD MINE COMPANY (LIMITED).—Notice is hereby given, that the SECOND GENERAL MEETING of the shareholders in this company will be HELD at Kennan's Hotel, Cheapside, in the City of London, on MONDAY, the 14th January inst., at One o'clock precisely, for the purposes of submitting a statement of the accounts, electing three directors, considering the propriety of declaring a dividend, and other business.

Signed, by order of the Directors, JOHN HOOLEY, Sec.
Offices of the Company, 10, St. Benet's-place, Gracechurch-street, London, December 21, 1860.

THE SOUTH DEVON IRON AND GENERAL MINING COMPANY (LIMITED).—Notice is hereby given, that a SPECIAL GENERAL MEETING of the shareholders of this company will be HELD at the offices of the company, City Bank Chambers, Threadneedle-street, E.C., on THURSDAY, the 17th inst., at One o'clock precisely, for the purpose of taking into consideration the undermentioned resolutions, passed at a meeting of shareholders, held on Thursday, the 3d inst., and with a view to their adoption, as recommended by the shareholders at the aforesaid meeting:—

"That the resolution passed at the general meeting of the shareholders, on the 6th August last, relating to the amount of the preferential dividend on the 6000 shares placed by the vendors at the disposal of the company, be rescinded, and that the preferential dividend be increased from 6 per cent. to 10 per cent."

"That in the event of the 6000 shares not being subscribed for by Thursday, the 17th inst., then the vendors to be at liberty to withdraw their offer—that is, of the 6000 shares made to the company on the 6th day of August last."

By order, GEORGE F. GOODMAN, Sec.
City Bank Chambers, Treadneedle-street, E.C., January 7, 1861.

COPIAPO MINING COMPANY.—Notice is hereby given, that a DIVIDEND of FIVE SHILLINGS PER SHARE is now in COURSE of PAYMENT, at the offices of the company, No. 2, New Broad-street. The scrip certificates must be left at the offices for examination, with the necessary form for claiming the dividend, one week before the same can be received.

Dated Jan. 1, 1860. By order of the Board, EDWARD J. COLE, Sec.

CONSOLIDATED COPPER MINES OF COBRE.—Notice is hereby given, that a HALF-YEARLY GENERAL MEETING of the proprietors of this association will be HELD, in conformity with the Deed of Settlement, at the offices of the company, Gresham House, Old Broad-street, on Monday, the 28th day of January inst., at One o'clock precisely.

On that day two directors (Charles William Grenfell, Esq., and Robert Passenger, Esq.) and one auditor (Pascoe Charles Glyn, Esq.) will go out of office by rotation, agreeably to the Deed of Settlement, but are immediately eligible, and are candidates for re-election.

It is necessary that persons intending to offer themselves as candidates for the direction or auditorship should leave notice of such their intention at the offices of the company at least 14 days before the day of election, and exclusive thereof.

WALTER SHAIRP } Directors of the
GEO. WHITMORE } Company.

Gresham House, Old Broad-street, January 7, 1861.

UNITED MEXICAN MINING ASSOCIATION.—Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of proprietors will be HELD at the office of the Association, No. 5, Finsbury-circus, on WEDNESDAY, the 30th day of January inst., at Two o'clock precisely.

Notice is hereby also given, that the above general meeting of proprietors will be made SPECIAL, for the purpose of considering and determining on resolutions to be then proposed, to authorise the directors (on any vacancy occurring in the office of director), in their discretion, either to fill up or not to fill up the same, provided the number of directors be not thereby reduced to less than five; and for varying the provisions of the Deed of Settlement, and any special resolutions of the association, whereby any greater number than five directors are required to be present to do or execute any particular act, matter, or thing; and to empower five directors to do and execute the same.

The transfer books will be closed on the evening of the 12th, and re-opened on the morning of the 31st inst. By order of a Court of Directors,

London, January 10, 1861. W. M. BROWNE, Acting Sec.

THE SCOTTISH AUSTRALIAN MINING COMPANY (LIMITED).—Notice is hereby given, that the ANNUAL GENERAL MEETING of the Scottish Australian Mining Company (Limited) will be HELD at the London Tavern, Bishopsgate-street, London, on TUESDAY, the 29th day of January inst., at One o'clock in the afternoon precisely.

The transfer books of the company will be closed on Friday, the 18th, preparatory to the meeting, and will remain so closed until Tuesday, the 29th inst., both days inclusive.

By order of the Directors, C. GRAINGER, Sec.
24, Gresham-street, London, January 7, 1861.

THE SCOTTISH AUSTRALIAN INVESTMENT COMPANY (LIMITED).—Notice is hereby given, that the HALF YEARLY GENERAL MEETING of the proprietors of the Scottish Australian Investment Company (Limited) will be HELD at the London Tavern, Bishopsgate-street, London, on FRIDAY, the 25th day of January inst., at Twelve o'clock at noon precisely.

The transfer books of the company will be closed preparatory to the meeting and payment of the dividend from Wednesday, the 16th, until Friday, the 25th inst., both days inclusive. By order of the Directors, C. GRAINGER, Sec.

24, Gresham-street, London, January 7, 1861.

THE NORTH BRITISH AUSTRALASIAN COMPANY (LIMITED).—Notice is hereby given, that the TWENTIETH ANNUAL GENERAL MEETING of the shareholders of the North British Australasian Company (Limited) will be HELD at the London Tavern, Bishopsgate-street, London, on TUESDAY, the 22d day of January inst., at Two o'clock in the afternoon, to receive the annual report and accounts of the company's affairs, and to declare a dividend.

Eustace Anderson and Samuel Ellis, Esqs., two of the directors, retire by rotation, and, being eligible, offer themselves for re-election.

The auditors, Henry Chatteris and Charles Edward Fuller, Esqs., also retire, and, being eligible, offer themselves for re-election.

The transfer books will be closed from Monday, the 7th, until the 29th day of January inst. By order of the Directors, DAVID BUDGE, Sec.

27, New Broad-street, London, E.C., January 3, 1861.

MOSTYYN FOUNDRY, NEAR HOLYWELL, FLINTSHIRE.

VERY IMPORTANT TO ENGINEERS, MACHINE MAKERS, MILLWRIGHTS, CONTRACTORS, MINERS, SMITHS, BROKERS, &c.

MR. HOWELL respectfully announces that he is favoured with instructions from the proprietor (who is retiring from the business) to SELL, BY AUCTION, on the 4th day of February next, and the three following days, until the whole is disposed of, the whole of the VALUABLE STEAM ENGINES, TOOLS, MACHINERY, PATTERNS, UTENSILS, and EFFECTS, consisting of a HIGH PRESSURE BEAM STEAM ENGINE, with cylinder 20 in. diameter, working a 5 ft. stroke, with TWO CYLINDRICAL STEAM BOILERS, 5 ft. diameter, 33 ft. and 35 ft. long; a 32 in. cylinder CONDENSING BEAM STEAM ENGINE, working a 6 ft. stroke; a 16 in. cylinder HIGH PRESSURE BEAM STEAM ENGINE, working a 3 ft. 6 in. stroke; a 20 in. cylinder HIGH PRESSURE BEAM STEAM ENGINE; TWO 7 in. cylinder HIGH PRESSURE DIRECT ACTING STEAM ENGINES; one strong vertical boring machine, for boring steam cylinders, &c., with bar, 10 in. diameter by 14 ft. long; small vertical boring and drilling machines, six lathes, of various descriptions; screwing machine, two planing machines, one slotting machine, drilling, boring, and engine fitters' tools; forge hammer, vertical and circular saw mills, smiths' tools, anvils, bellows, slack troughs, large foundry crane, beam slings, chains, iron stove doors, stove carriages, loam mill, cupolas, casting ladles, moulding boxes, boiler makers' punching and shearing machine; plate-bending machine, swage blocks, moulds and blocks for manufacturing railway wheels; weighing machine, scales, weights, chains, blocks, and falls, crab winches, triangles, cranes, strong broad-wheeled timber carriage, ditto boiler carriage, patterns for land and marine steam engines, mill gearing, pipes, pumps, columns, cranes, weighing machines, &c.; four-horse threshing machine, four-wheeled carriage, two gigs, and gas apparatus, with gasometer, 12 ft. diameter; and other valuable and miscellaneous effects, particulars of which will be set forth in descriptive catalogues, which are in course of preparation.

These catalogues may be had at the Mostyn Foundry, as aforesaid; Mr. EYTON, 34, James-street, Liverpool; Messrs. ARMSTRONG, WILLIAMS, and Co., lead merchants, 37 and 39, Granby-row, Manchester; and the auctioneer's office, Bagillt, Holywell—any, a fortnight before the time of the sale, and sent by post, on application.

The Mostyn Foundry is about half a mile from Mostyn station on the Chester and Holyhead Railway; also the same distance from Mostyn Quay, being the station of the Liverpool and Mostyn steamer, the *Fanny*.

TO BE SOLD, BY AUCTION, at the Clarendon Rooms, South John-street, Liverpool, on Tuesday, the 15th day of January, 1861, at Two o'clock in the afternoon, subject to conditions of sale, and in lots as may be agreed upon, EIGHT THOUSAND SHARES of £1 each, all paid up, in the capital of the SMELTING REDUCTION LIME AND COAL COMPANY (LIMITED). The works of the company are at Broncoed, near Mold, in Flintshire.—For further particulars, apply to Mr. T. F. ANDERSON, solicitor, Liverpool.

NORTH STAFFORDSHIRE.

TO BE SOLD, BY PRIVATE CONTRACT, a compact FREEHOLD ESTATE, called the RED LION ESTATE, situate in the township of Bucknall, in the parish of Stoke-upon-Trent, in the county of Stafford, and within little more than a mile of the flourishing borough of Hanley, in the Staffordshire Potteries. The estate lies nearly in a ring fence, and consists of nine closes of land, containing together 31 a. 0 r. 25 p., or thereabouts, now in the occupation of Benjamin Allen, under which are very valuable mines of coal now in course of working. The mines are let on lease to Messrs. Forrester and Co., at a minimum rent of £200 per annum, for a term of which 16 years were unexpired at Michaelmas last.

For further particulars and to treat, apply to Mr. W. S. COPE, mining engineer, Hallfield Cottage, Hanley, Staffordshire Potteries; or to Messrs. WARD and SON, solicitors, Newcastle, Staffordshire.

LAND, &c., FOR SALE VERY CHEAP, IN WHITINGTONIA, ATLANTIC SEA OF CENTRAL AMERICA.—A district five miles of coast by 100 of interior, within three weeks of England by Royal Mail Steamers, fortnightly. Woods, pastures, &c., of diversity and utility, farming, gardening, planting, mining, precious metals, and other indigenous product-collecting incentive, all of great value and variety, with water and other facility. Of this property, sections of 1 mile of coast by 100 of interior may be had.—Apply to "R. M.," *Mining Journal* office, 26, Fleet-street, London, E.C.

Prices:—£25,000 for the area 5 miles of coast by 100=320,000 acres; £6000 per section 1 mile of coast by 100 of country=64,000 acres; £1000 per lot of mile on river by 10 miles of interior land=6400 acres: £600 for 5 square miles=3200 acres; £150 for a square mile of 640 acres.

TO IRONMASTERS.—The ADVERTISER, who RETIRED from the MANAGEMENT of one of the leading IRONWORKS in this country to engage in other pursuits, is OPEN to an ENGAGEMENT, at home or abroad. He is a thoroughly practical iron maker, has worked his way up through all the leading branches of the trade, and now, in the prime of life, possesses that valuable experience which can only be obtained from the management of large concerns. He erected, and for many years conducted, a work having 16 blast furnaces, with rail, plate, and bar mills, producing 2000 tons finished iron weekly. From the variety of ironstones and coal used, he has obtained a thorough knowledge of that branch of his business, and in the mills his attention has been directed to producing the largest and highest class of boiler, ship, and armour plates. Unexceptionable references will be laid before any party requiring his services. No objection to be engaged as a boiler plate or rail inspector.—Address, "F. G.," *Mining Journal* office, 26, Fleet-street, London, E.C.

TO COLLIERY OWNERS, MINE COMPANIES, &c.—SMITH AND OLIVER, MECHANICAL and MINING ENGINEERS, SWANSEA, UNDERTAKE to SINK SHAFTS, ERECT MACHINERY, PIT FRAMING, and to COMPLETE EVERY KIND of COLLIERY WORK, either at home or abroad. PLANS, SPECIFICATIONS, and ESTIMATES PREPARED.

SLATE QUARRY, NORTH WALES.—THREE GENTLEMEN, with £1000 each, are INVITED to JOIN FOUR OTHERS as a LIMITED LIABILITY COMPANY in the above. The profits of a slate quarry in full work are from 15 to 40 per cent. per annum.—Address, post-paid, Mr. D. DAVIES, care of Messrs. Catherall and Nixon, booksellers, Bangor; or J. R. JENNINGS, Esq., 28, St. Swithin's-lane, London, E.C.

SLATE QUARRY WITH LIMITED LIABILITY, NORTH WALES.—CAPITAL REQUIRED to FURTHER DEVELOPE a QUARRY opened and at work. Contributors of not less than £500 each will be attended to. It may suffice to observe that all the leading quarries are full of orders up to the end of next May.—Apply by letter, post-paid, to "Schistus," care of Mr. Edward Edwards, Ironmonger, Bangor.

BELL BROTHERS beg to intimate that, having become SOLE LICENSEES in the United Kingdom of PROF. DEVILLE'S METHOD of PRODUCING PURE ALUMINIUM, they are now in a POSITION to SUPPLY, from their works here, both this metal and its compound with copper, known under the name of ALUMINIUM BRONZE.—Newcastle-on-Tyne, September, 1860.

VENTILATION OF MINES.—ELLIS LEVER INVITES the ATTENTION of OWNERS, VIEWERS, and MANAGERS of COLLIERIES to his recently IMPROVED MATERIAL for BRATTICING and MAKING TRAP DOORS, in the working of coal mines. It is made in every width, and in various qualities, prices of which may be had on application.

For the VENTILATION of SHAFTS, and for CONVEYING AIR to the various UNDERGROUND WORKINGS of MINES, ELLIS LEVER has contrived and introduced a VERY SERVICEABLE DESCRIPTION of WATER-PROOF and AIR-PROOF TUBES, from 1 to 6 ft. diameter, and in unlimited lengths.

Further information may be had on application to the manufacturer, ELLIS LEVER, West Gorton Works, Manchester.

"THE RAILWAY AND THE MINE."—LEVER'S Illustrated Year-Book for 1861, price 2s. 6d., may be had in London of Simpkin, Marshall, and Co., and all booksellers throughout the kingdom.

IMPORTANT TO PROPRIETORS OF STEAM BOILERS.—EASTON'S PATENT BOILER FLUID EFFECTUALLY REMOVES and PREVENTS INCRUSTATION in STEAM BOILERS, WITHOUT INJURY to the METAL, with GREAT SAVING in FUEL, and with LESS LIABILITY to ACCIDENT from EXPLOSION. Testimonials from eminent engineers, boiler makers, millwrights, and manufacturers, with full particulars, will be forwarded on application to P. S. EASTON and G. SPRINGFIELD, sole manufacturers and patentees, Nos. 37, 38, and 39, Wapping-wall, London, E. [COPY.]

Grove, Southwark, S.E., 19th July, 1860.

GENTLEMEN,—We have great pleasure in testifying to the efficacy of your patent boiler fluid, which we have now used upwards of three years. Our boilers are of the form termed elephant, of about 70 horses power, and we were obliged to clean them out every month, when they were chipped, and three or four barrowfuls of scale and mud removed from them. Since using your fluid our boilers are perfectly free from scale, and we do not find it necessary to clean them oftener than once in three months; we have never used the chipping-hammer to them since we first used the fluid. We have no hesitation in saying that it has no action upon metals, having made experiments to satisfy ourselves on this point. We are faithfully yours, EASTON, AMOS, AND SONS.

Messrs. P. S. Easton and G. Springfield, 37, 38, and 39, Wapping-wall, E.

SUPERIOR STEAM ENGINE FOR SALE.—The well-known and highly-finished 16 horse power LOW PRESSURE BEAM ENGINE, made by Maudslay and Co., and formerly used as a supplementary engine on the Blackwall Railway, when worked by rope traction and stationary engines. It is in thorough repair, and equal to new. Plates, dimensions, &c., may be seen in Tredgold's and other scientific works, and it has been eulogised as the handsomest, and one of the best in London. May be seen, and particulars obtained, on application to P. S. EASTON and G. SPRINGFIELD, manufacturers and patentees of "Easton's Patent Boiler Fluid," for preventing and removing incrustation in steam boilers, Nos. 37, 38, and 39, Wapping-wall, London, E.

FOR SALE, a 26½ in. cylinder CONDENSING ROTARY ENGINE, 5 ft. stroke. An 18 in. cylinder CORNISH WINDING ENGINE, 4 ft. stroke, with winding gear and new crusher attached. Also, TWO good BOILERS, 8½ tons each.—Apply to W. H. ROWE, Newtownards Mines, County Down.

HAULAGE BY STEAM ON COMMON ROADS, BY BOYDELL'S TRACTION ENGINE.—To PERSONS DESIROUS of HAVING MINERALS or HEAVY MATERIALS REMOVED by CONTRACT.—Apply to F. H. HEMMING, 25, Moorgate-street, E.C.

WILSON'S BREECH-LOADING RIFLE.—MR. THOMAS WILSON begs to CALL ATTENTION to his new BREECH-LOADING RIFLES and CARBINES, which after repeated trial are pronounced by the highest authorities to be the most simple, safe, and efficient breech-loading weapons ever introduced. All enquiries and other communications to be addressed to Messrs. Rabone Brothers, and Co., 47, Broad-street, Birmingham, who have the management of the patent, and from whom every information as to cost and other details can be obtained.

The patent rifles may be obtained through the London and Birmingham gun trades, and all respectable gun makers in the kingdom, as well as through Messrs. Rabone Brothers and Co., 47, Broad-street, Birmingham.

N.B.—All guns manufactured under this patent are viewed by the patentee, and if made correctly are marked **T. W.** under a small crown on the Nock's form of the barrel.

BEDFORD IRONWORKS, TAVISTOCK.

NICHOLLS, WILLIAMS, AND CO. have the following FOR SALE, and generally a GOOD STOCK of SECOND-HAND MINING MATERIALS:—Ironwork for a water-wheel, 40 ft. diameter, 2¼ ft. breast; a 10 horse power TABLE ENGINE, in excellent condition. For particulars and viewing the above, apply at the works.

NICHOLLS, WILLIAMS, and Co. also beg to announce that they MANUFACTURE STEAM ENGINES of every description on the newest principle. Castings and wrought-iron work made at the shortest notice. Machinery sent to all parts of the world, and competent engineers to erect the same. Steam boilers and chains made, and warranted of the best description.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—

REFINED METALLIC NICKEL.	OXIDE OF COBALT. [WIRE, &c.
REFINED METALLIC BISMUTH.	GERMAN SILVER—IN INGOTS, SHEET

NICKEL AND COBALT ORES PURCHASED.

ANALYTICAL AND METALLURGIC LABORATORY, ST. MARY'S HOSPITAL, PADDINGTON, W.

Laboratory pupils received for special instruction in general and analytical chemistry. Arrangements entered into by the session or the month. Analyses, assays, and chemical investigations conducted by FREDERICK FIELD, F.R.S.E., M.R.I.A., &c., Lecturer on Chemistry at the Hospital, &c.—For particulars, apply to Mr. FIELD, Chemical Department, St. Mary's Hospital.

ASSAY OFFICE AND LABORATORIES DUNNING'S ALLEY, BISHOPSGATE STREET WITHOUT, LONDON.

Conducted by MITCHELL and RICKARD (late John Mitchell, F.C.S., Author of *Manual of Practical Assaying*, Metallurgical Papers, &c.)

Assays and Analyses of every description performed as usual. Special Instruction in Assaying and Analysis. Consultations in every branch of Metallurgical and Manufacturing Chemistry. Assistance rendered to intending Patentees, &c.

For amount of fees, apply to the office, as above.

BASTIER'S PATENT CHAIN PUMP, APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, &c.

J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects, farmers, and the public in general, to his new pump, the cheapest and most efficient ever introduced to public notice. The principle of this new pump is simple and effective, and its action is so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shafts, and unites lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells of any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion. The following statement presents some of the results obtained by this hydraulic machine, as daily demonstrated by use:—

1.—It utilises from 90 to 92 per cent. of the motive power.
2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.
3.—It occupies a very small space.
4.—It raises water from any depth with the same facility and economy.
5.—It raises with the water, and without the slightest injury to the apparatus sand, mud, wood, stone, and every object of a smaller diameter than its tube.
6.—It is easily removed, and requires no cleaning or attention.

To be seen daily at W. P. Warner's, wine and spirit merchant, Welsh Harp, Edgware-road, near Cricklewood. References of the highest character will be given.

J. U. BASTIER, sole manufacturer, will CONTRACT to ERECT his PATENT PUMP at HIS OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will GRANT LICENSES to manufacturers, mining proprietors and others, for the USE of his INVENTION.

OFFICES, 19, MANCHESTER BUILDINGS, WESTMINSTER, LONDON.
London, Oct. 10, 1859. Hours, from Ten till Four. J. U. BASTIER, C.E.

AUSTRALIA AND NEW ZEALAND WHITE STAR EX-ROYAL MAIL CLIPPERS, SAILING FROM LIVERPOOL to MELBOURNE on the 1st and 20th of every month. FOR MELBOURNE.

Ship.	Captain.	Register.	Burthen.	To sail.
RED JACKET	BILLING	2000	5500	Jan. 20.
DAVID G. FLEMING	HATFIELD	1664	5000	Feb. 20.

The clippers of this line are the largest, finest, and handsomest in the trade, and are well known for their famous passages, and the unswerving punctuality of their sailing engagements. Passengers must embark, without fail, on the day previous to advertised date.—For freight or passage apply to the owners, H. T. WILSON and CHAMBERS, 21, Water-street, Liverpool; or to GRINDLAY and Co., 55, Parliament-street; or SEYMOUR, PEACOCK, and Co., 116, Fenchurch-street, London.

Willox's Australian and New Zealand hand-books sent for two stamps.

LEICESTER AND CO. (late Leicester, Brache, and Teague), CONSULTING MINING ENGINEERS AND SURVEYORS, AND GENERAL MINING AGENTS, MELBOURNE, VICTORIA, PROCURE MINING LEASES on ELIGIBLE TERMS from the GOVERNMENT of VICTORIA and NEW SOUTH WALES, on receipt of a remittance for £200, to cover costs of lease, survey and report, &c. Messrs. LEICESTER and Co. OFFER to TAKE the MANAGEMENT of MINING COMPANIES, and PROVIDE OFFICE ACCOMMODATION, for a free interest in the capital stock of the company.

For further particulars, apply to Mr. RICHARD MIDDLETON, *Mining Journal* office, 26, Fleet-street, London, E.C.

All remittances must be made through our bankers, the Union Bank of Australasia.

NEW GEOLOGICAL WORK.

A geological work of some interest to the iron trade, treating of the ironstone of the Cleveland district, North Yorkshire, is about to be published by Mr. A. Reid, of Newcastle-upon-Tyne, from the pen of a gentleman every way qualified for the task, which promises, we understand, to add much additional information of a valuable character to our geological knowledge respecting that interesting locality, which has been the scene of the author's labours for many years, and, therefore, all interested in the subject may anticipate its perusal with pleasure. Those who have perused the MS., and who are well versed in the iron trade of the district, speak highly of the work.—*Mining Journal.*

Now ready, price 21s. (21s. 8d. by post), royal octavo, bound in cloth, lettered,

CLEVELAND IRONSTONE.—A TREATISE on the IRONSTONE OF THE CLEVELAND DISTRICT, illustrated by a large Geological Map of part of the North Riding of Yorkshire, with coloured sections representing the whole of the consecutive strata between the lower lias and oolitic limestone; and also delineating the position of the ironstone deposit along the line of the North Yorkshire Railway, between the port of Whitby on the east and Stokesley on the west, of the iron field; together with remarks on ironstone mining, elucidated by plans, &c.

By JOSEPH BEWICK, Grosmont, Yorkshire.

Newcastle-on-Tyne: Printed and published by Andrew Reid, 40, Pilgrim-street (who will receive subscribers' names).

London: J. Weale, 59, High Holborn; and the *Mining Journal* office, 26, Fleet-street.

INVESTMENTS IN BRITISH MINES.— MR. MURCHISON publishes a QUARTERLY REVIEW OF BRITISH MINING, giving at the same time the POSITION and PROSPECTS of the MINES at the end of each Quarter, the DIVIDENDS PAID, &c.; price One Shilling. RELIABLE INFORMATION and ADVICE will at any time be given by Mr. MURCHISON, either personally or by letter, at his Offices, No. 117, BISHOPSGATE-STREET WITHIN, LONDON, where copies of the above publication can be obtained.

OPINIONS OF THE PRESS ON MR. MURCHISON'S WORK ON BRITISH MINING, PUBLISHED IN 1856.

Mr. Murchison's new work on British Mines is attracting a great deal of attention, and is considered a very useful publication, and calculated to considerably improve the position of home mine investments.—*Mining Journal.*

The book will be found extremely valuable.—*Observer.*

A valuable guide to investors.—*Herapath.*

Mr. Murchison takes sound views upon the important subject of his book, and has placed, for a small sum, within the reach of all persons contemplating making investments in mining shares that information which should prevent rash speculation and unproductive outlay of capital in mines.—*Morning Herald.*

A valuable little book.—*Globe.*

Of special interest to persons having capital employed, or who may be desirous of investing in mines.—*Morning Chronicle.*

As a guide for the investment of capital in mining operations is inestimable. One of the most valuable mining publications which has come under our notice, and contains more information than any other on the subject of which it treats.—*Derby Telegraph.*

Parties requiring information on mining investments will find no better and safer instructor than Mr. Murchison.—*Leeds Times.*

To those who wish to invest capital in British Mines, this work is of the first importance.—*Welshman.*

This is really a practical work for the capitalist.—*Stockport Advertiser.*

This work enables the capitalist to invest on sound principles; in truth, it is an excellent guide.—*Plymouth Journal.*

All who have invested, or intend to invest, in mines, would do well to consult this very useful work.—*Ipswich Express.*

Persons desirous to invest their capital in mining speculations, will find this work a very useful guide.—*Warwick Advertiser.*

We believe a more useful publication, or one more to be depended on, cannot be found.—*Plymouth Herald.*

Of great value to capitalists.—*Sunderland Times.*

Those interested in mining affairs, or who are desirous of becoming speculators, should obtain and carefully peruse the work.—*Monmouth Beacon.*

With such a work in print, it would be gross neglect in an investor not to consult it before laying out his capital.—*Poole Herald.*

Every person connected, or who thinks of connecting himself, with mining speculations should possess himself of this book.—*North Wales Chronicle.*

A very valuable book.—*Cornwall Gazette.* [*Glasgow Examiner.*

All who have invested, or intend to invest, in mines should peruse this able work.

Mr. Murchison will be a safe and trustworthy guide, so far as British Mines are concerned.—*Bath Express.*

Is deserving the attention of every one who seeks profitable investment of his capital.—*Brighton Examiner.*

It is full of carefully compiled and reliable information relative to all the known mines in the United Kingdom.—*Sheffield Free Press.*

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THE WESTERN MORNING NEWS.—The circulation of the *Western Morning News* exceeds the united circulation of all the other newspapers published in Devonshire and Cornwall. Office for advertisements, 26, Bedford-street, Plymouth

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RAILWAY WAGONS.—WILLIAM A. ADAMS AND CO., MIDLAND WORKS, BIRMINGHAM.

BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS.

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NEW AND SECOND-HAND RAILWAY WAGONS ALWAYS IN STOCK FOR SALE OR HIRE.

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The Original Inventors and First Manufacturers of the Patent Wrought-Iron Tubes for Gas, Steam, Water, &c. Enamelled Tubing, and Glazed ditto. Russell and Howell's Homogeneous Tubes. And agents for G. F. Muntz's Solid Brass Tubes. Every variety of fittings. Trade mark, ♔

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MANUFACTURERS OF PATENT LAP-WELDED IRON TUBES, FOR LOCOMOTIVE, MARINE, AND STATIONARY BOILERS.

IMPROVED HOMOGENEOUS METAL TUBES.

ALL DESCRIPTIONS OF TUBES AND FITTINGS FOR GAS, STEAM AND WATER, PLAIN, GALVANISED AND ENAMELLED.

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SHORTRIDGE, HOWELL, AND CO., HARTFORD STEEL WORKS, SHEFFIELD, SOLE MANUFACTURERS of HOWELL'S PATENT HOMOGENEOUS METAL PLATES for BOILERS, LOCOMOTIVE FIRE BOXES, and TUBES, COMBINING the STRENGTH of STEEL with the MALLEABILITY of COPPER. RUSSELL AND HOWELL'S PATENT CAST STEEL TUBES. MCCONNELL'S PATENT HOLLOW RAILWAY AXLES.—For prices and terms, apply to SHORTRIDGE, HOWELL, and Co., Hartford Steel Works, Sheffield; or Messrs. HARVEY and Co., 12, Haymarket, London.

BRITISH CHARCOAL PIG IRON. COLD BLAST HEMATITE PIG IRON.

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ROBERT MUSHET'S CAST STEEL.—The BEST and therefore the CHEAPEST in the market. ESPECIALLY SUITED for MINING PURPOSES. See testimonials at foot:—

Gloucester, Dec. 31, 1859.—GENTLEMEN: I have found the cast-steel bars very hard to groove, and had it not been for the excellent tool steel you sent me I must have given up the work in despair. Yours truly, WILLIAM HARRIS.

Robert Mushet and Co., Forest Steel Works, Coleford.

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Robert Mushet and Co., Coleford.

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R. Mushet and Co., Forest Steel Works, Coleford. (for J. W. Smith.)

For terms, &c., apply to ROBERT MUSHET and Co., Forest Steel Works, near Coleford, Gloucestershire.

PATENT LEVER BREAK, FOR RAILWAY WAGONS, doing away with the objectionable break rack. Can be APPLIED to EXISTING STOCK at a TRIFLING EXPENSE. Royalty moderate. Models can be seen at 34, Great George-street, Westminster; and the breaks in action at the works of the Railway Carriage Company; at the Peterboro' Station, on the Eastern Counties Railway; the Rugby Station, London and North-Western Railway; the Cardiff Docks Station, Taff Vale Railway; and at the Works, Oldbury, near Birmingham, where all communications are requested to be sent.

FITZMAURICE PURE GAS LIGHT WORKS (large and small) continue SATISFACTORILY FITTED in many noblemen's MANSIONS, TOWNS, COTTAGES, FARMS, FACTORIES, SHIPS, and MINES. The same retort makes either oil gas or coal gas. Oil gas is brilliant, pure, detectable in odour, and free from sulphur. (See "Cottage Gas Works," 6d., Hebert, Cheapside). Complete moveable gas works, with gasometer, for 5 lights, £24; 20 lights, £75; 100 lights, £230; larger works in reduced proportion. Gas fitting done, chandeliers made or altered. Factory, 44, St. John's-square, Clerkenwell. JAMES COPCUTT, manager. Nothing to do with the Lime Light Company.

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For LICENSES to USE the above process, apply to ROBERT LONGDON, 63, King-street, Manchester.

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This blasting powder possesses the following advantages over every other in use:—Its COMBUSTION is SLOWER and MORE PERFECT when confined in the hole, PRODUCES LESS SMOKE, is LESS DANGEROUS, and it generally BURSTS MORE ROCK with a CHARGE OCCUPYING the SAME SPACE, but WEIGHING from TWENTY to THIRTY PER CENT. LESS than other powder, EFFECTING an IMPORTANT SAVING.

DAVEY, BROTHERS, and Co. beg to state that this powder is specially made for blasting, and from its slow combustion is not adapted for projectiles. They would, therefore, caution consumers against the efforts of interested parties to put it to a fallacious trial, by firing a ball from a mortar, which is no test of its explosive force when confined.

GARNOCK, BIBBY, AND CO., MANUFACTURERS OF HEMP AND MANILLA CORDAGE, AND IMPROVED PATENT NON-TWISTED WIRE-ROPE, FOR SHIPS' RIGGING, MINES, &c.

The superiority of Garnock, Bibby, and Co.'s wire rope was fully proved at a PUBLIC TEST, solely instituted by Messrs. R. S. Newall and Co., at the Liverpool Corporation Testing Works, on October 29th, 1860,

When samples taken promiscuously from our stock by their agent were found to average 13 per cent. over our trade card, and to be the strongest of all the samples from various manufacturers then tested.

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PATENT SAFETY FUSE.—The GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH DAVEY, and PRYOR who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which, being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder.

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N.B.—If requested to do so, the patentee will send a safety cage, with its guide-rods and frame complete, to any mining district, at his own expense, for the purpose of its being tried and tested. He has no doubt that the other patentees will do the same.

Apply to the patentee, ROBERT AYTOUN, 3, Fettes-row, Edinburgh.

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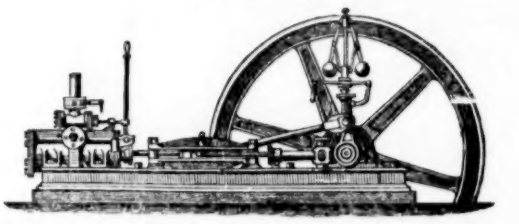

HIGH PRESSURE STEAM ENGINES, from 2½ to 30 horse power, and upwards, adapted for MILLS, AGRICULTURAL, MINING, and GENERAL PURPOSES. The following sizes are ready for immediate delivery, and may be seen at any time at their London depôt:—

ONE 5 in. cylinder, 10 in. stroke.	ONE 12 in. cylinder, 36 in. stroke.
TWO 8 in. cylinder, 18 in. stroke.	ONE 14 in. cylinder, 36 in. stroke.
ONE 10 in. cylinder, 18 in. stroke.	ONE 17 in. cylinder, 36 in. stroke.
ONE 14 in. cylinder, 24 in. stroke.	TWO 20 in. cylinder, 36 in. stroke.

Prices and full particulars sent on application.

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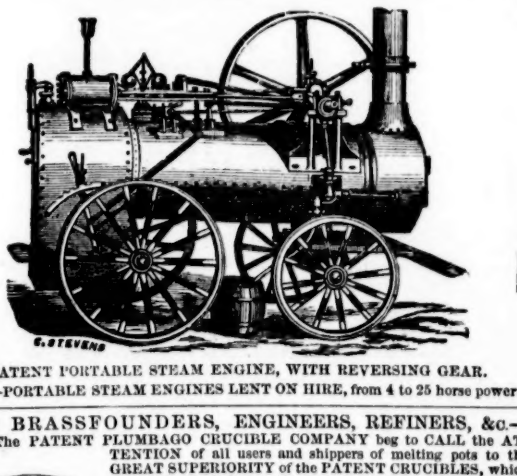

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Also, sole proprietors of fine POWDERED PURE FLOUR PLUMBAGO, which they can confidently recommend for anti-friction purposes, being an impalpable powder, and warranted perfectly free from grit and any impurity. For ordinary polishing purposes it will be found superior to any of the black leads offered. Price, £27 10s. per ton; 30s. per cwt. Samples of 28 lbs. forwarded on receipt of 8s. Packages free.

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SCREW JACKS, SHIP JACKS.

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40,000 SUFFERERS from PURE NERVOUS MIND AND HEAD COMPLAINTS, as Headache, Loss of Memory, Giddiness, Blood to the Head, Depression, Palpitation of the Heart, Unfitness for Business or Study, Sleeplessness, Fear of Insanity, or other Nervous Symptoms, after trying all advertised and other remedies without a cure, have been obliged to apply to the Rev. Dr. WILLIS MOSELEY, 18, Bloomsbury-street, Bedford-square, London, and fifty are not known to be uncured. Means of cure sent to all parts. Franked for 13 stamps, his 12 chapters on Nervous and Mental Complaints, 12th edition (new), called by Prof. Savage, surgeon, "the best book on nervousness" (Simpkin, Marshall, and Co., publishers).

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TWENTY THOUSAND COPIES OF A MEDICAL BOOK for gratuitous circulation. HENRY SMITH, Doctor of Medicine of the Royal University of Jena, &c., who has devoted 15 years to the study and Treatment of Nervous Debility, Loss of Memory, and Indigestion, will send free, for the benefit of Nervous Sufferers, a copy of the NEW MEDICAL GUIDE, containing his highly successful mode of treatment, with necessary instructions by which sufferers may obtain a cure. Post free on receipt of a stamped directed envelope, from the author's residence, 8, Burton-crescent, Tavistock-square, London, W.C.

THE MINING SHARE LIST.

DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last Paid.
4000	Bedford United (copper), Tavistock†	2 6 8..	6 ..	5¼ 5½ ..	11 19 6.. 0 2 6	—Dec. 1860
240	Boscean (tin), St. Just†	20 10 0..	50 ..	..	29 0 0.. 1 10 0	—Nov. 1860
200	Botallack (tin, copper), St. Just	91 5 0..	200 ..	190 ..	443 5 0.. 2 10 0	—Feb. 1860
2000	Bronfloyd (lead), Cardiganshire [L.]	4 0 0..	7½..	..	0 4 0.. 0 2 0	—Jan. 1860
200	Brynford Hall (lead), Flintshire	12 10 0..	37½..	30 32 ..	14 0 0.. 2 10 0	—Oct. 1860
1000	Carn Brea (copper, tin), Illogan†	15 0 0..	102½..	100 ..	267 10 0.. 2 0 0	—Oct. 1860
2048	Carnyorth (tin), St. Just	3 10 0..	3⅜..	..	0 19 6.. 0 2 0	—Sept. 1860
50000	Connorree (copper, sulphur) [L. £1]	0 15 0..	59s. ..	57s. ..	0 0 9.. 0 0 9	—July, 1860
12000	Copper Miners of England	25 0 0..	25 ..	..	7½ per cent.	—Half-yrly.
350000	Ditto ditto (stock)	100 0 0..	24 ..	..	1 per cent.	—Half-yrly.
1055	Craddock Moor (copper), St. Cleer*	8 0 0..	27 ..	..	4 15 0.. 0 5 0	—Nov. 1860
867	Cwm Erfin (lead) Cardiganshire	7 10 0..	12 ..	..	3 13 0.. 0 15 0	—Jan. 1861
128	Cwmystwith (lead), Cardiganshire*	60 0 0..	240 ..	..	212 10 0.. 5 0 0	—Nov. 1860
280	Derwent Mines (sil.-lead), Durham	300 0 0..	180 ..	..	137 0 0..10 0 0	—June, 1860
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0..	425 ..	..	732 0 0.. 7 0 0	—Nov. 1860
358	Dolcoath (copper, tin), Camborne*	128 17 6..	500 ..	535 ..	601 10 0..10 0 0	—Dec. 1860
512	East Basset (cop.), Redruth [S.E.]	29 10 0..	117½..	112½ 117½..	67 0 0.. 5 0 0	—Nov. 1860
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6..	11¾..	11¾ 12 ..	0 2 6.. 0 2 6	—Nov. 1860
300	East Darren (lead), Cardiganshire*	62 0 0..	67 ..	..	73 10 0.. 1 0 0	—Dec. 1860
2048	East Wheal Lovell (tin), Wendron	2 10 0..	— ..	..	0 5 0.. 0 5 0	—July, 1859
1400	Eyam Mining Co. (lead), Derbyshire	5 0 0..	38 ..	..	19 13 4.. 1 0 0	—Dec. 1859
4940	Fowey Consols (copper), Tywardreath	4 0 0..	5 ..	..	41 9 3.. 0 2 6	—June, 1860
2560	Foxdale, Isle of Man, Limited (lead)†	25 0 0..	35 ..	..	61 8 3.. 1 0 0	—Dec. 1860
486	Grambler and St. Aubyn (cop.) [S.E.]	46 10 0..	27 ..	23 25 ..	23 0 0.. 1 0 0	—July, 1860
6000	Great South Tolgus [S.E.], Redruth*	0 14 6..	9¼..	7⅞ 8⅛ ..	7 8 6.. 0 7 0	—Dec. 1860
1798	Great Wheal Fortune, Breage	18 6 0..	22 ..	11 12 ..	0 10 0.. 0 10 0	—Mar. 1860
1024	Herodsfoot (id.), near Liskeard [S.E.]	8 10 0..	35 ..	33 35 ..	10 15 0.. 1 10 0	—Oct. 1860
200	Herward United (lead), Flintshire	37 0 0..	31 ..	..	3 0 0.. 1 10 0	—July, 1860
5000	Kelly Bray (lead, copper), Callington	3 19 6..	34s. ..	..	0 4 0.. 0 2 0	—Feb. 1860
160	Levant (copper, tin), St. Just	2 10 0..	142½..	..	1091 0 0.. 5 0 0	—May, 1860
400	Lisburne (lead), Cardiganshire, Wales	18 15 0..	125 ..	..	362 10 0.. 3 0 0	—Dec. 1860
9000	Marke Valley (copper), Caradon	4 10 6..	4¼..	4 4¼ ..	0 11 0.. 0 3 0	—Nov. 1860
5000	Mendip Hills (lead) [L.], Somerset	3 15 0..	1¾..	..	1 18 6.. 0 5 0	—May, 1859
1800	Minera Mining Co., Lim. (id.), Wrexham	25 0 0..	160 ..	..	62 18 3.. 3 7 6	—Nov. 1860
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0..	14½..	13⅜ ..	14 0 11.. 0 4 10	—Jan. 1860
640	Mount Pleasant, Mold	4 0 0..	— ..	..	11 15 7.. 0 12 0	—Nov. 1860
6000	North Great Work, Breage	1 0 0..	4⅛..	..	0 2 0.. 0 2 0	—May, 1860
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 6..	10 ..	..	35 14 6.. 0 5 0	—Nov. 1860
200	Phœnix (copper, tin), Linkinghorne	100 0 0..	435 ..	..	394 10 0..50 0 0	—Nov. 1860
1772	Polberro (tin), St. Agnes	— ..	5 ..	..	5 14 6.. 0 10 0	—Nov. 1860
1120	Providence (tin), Uny Lelant† [S.E.]	10 6 7..	47 ..	45 47 ..	57 15 0.. 1 10 0	—Nov. 1860
16	Rhosemor	50 0 0..	— ..	..	1250 0 0..100 0 0	—
512	Rosewarne United (cop., tin), Gwinear	15 0 0..	30 ..	25 27½ ..	33 10 0.. 1 0 0	—Sept. 1860
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0..	310 ..	300 310 ..	331 0 0.. 5 0 0	—Nov. 1860
512	South Tolgus (cop.), Redruth, Cornwall*	8 0 0..	62½..	57½ 60 ..	100 0 0.. 1 10 0	—Nov. 1860
496	South Wheal Frances, Illogan* [S.E.]	18 18 9..	160 ..	155 160 ..	351 15 0.. 1 10 0	—Nov. 1860
280	Spearne Moor (tin, copper), St. Just	31 17 9..	30 ..	..	7 5 0.. 1 0 0	—Nov. 1860
940	St. Ives Consols (tin), St. Ivest	8 0 0..	51 ..	48 50 ..	482 5 0.. 1 15 0	—Nov. 1860
9600	Tamar Con. (sil.-id.), Beeralston [S.E.]	4 10 0..	2⅜..	2¼ 2¼ ..	5 6 0.. 0 2 6	—Jan. 1861
6000	Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0..	6 ..	5⅞ 6⅛ ..	10 3 6.. 0 5 0	—Jan. 1860
6000	Tolvadden (copper), Marazion	— ..	2⅜..	2¾ 3 ..	0 13 6.. 0 3 0	—Mar. 1860
572	Trelyon Consols (tin), St. Ives	11 10 0..	18 ..	16 18 ..	7 0 0.. 0 10 0	—Sept. 1860
200	Trumpet Consols (tin), near Helston	57 10 0..	72½..	..	46 0 0.. 2 0 0	—Nov. 1860
400	United Mines (copper), Gwennap	40 0 0..	60 ..	..	80 5 0.. 2 10 0	—April, 1860
1024	Wendron Consols (tin), Wendron	11 13 10..	27 ..	23 25 ..	8 15 0.. 1 0 0	—Jan. 1861
6000	West Basset (copper), Illogan [S.E.]	1 10 0..	18 ..	17⅛ ..	20 2 0.. 0 8 0	—Nov. 1860
60	West Barton Gill (lead), Yorkshire	50 0 0..	— ..	..	11 10 0.. 3 0 0	—Oct. 1860
1024	West Caradon (cop.), Liskeard [S.E.]*	5 0 0..	80 ..	77½ 80 ..	92 1 3.. 2 10 0	—Nov. 1860
256	West Damsel (copper), Gwennap	37 0 0..	55 ..	60 62 ..	45 0 0.. 1 0 0	—May, 1860
6400	West Fowey Consols (tin and copper)	7 10 0..	5¼..	..	0 9 0.. 0 3 6	—Sept. 1860
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0..	370 ..	360 370 ..	278 0 0..10 10 0	—Dec. 1860
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6..	120 ..	112½ 117½..	563 10 0.. 3 0 0	—Dec. 1860
256	Wheal Buller (cop.), Redruth* [S.E.]	5 0 0..	160 ..	125 130 ..	923 0 0.. 2 0 0	—Nov. 1860
500	Wheal Clifford (cop.), Gwennap [S.E.]	— ..	215 ..	200 210 ..	80 10 0.. 2 0 0	—Dec. 1860
128	Wheal Friendship (copper), Devon	50 0 0..	90 ..	..	2395 10 0.. 5 0 0	—Aug. 1860
512	Wheal Jane (silver-lead), Kea	3 10 0..	18 ..	..	10 10 0.. 1 0 0	—Feb. 1860
5000	Wheal Kitty (tin), St. Agnes	4 10 0..	2 ..	..	0 18 6.. 0 2 0	—July, 1860
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	1 7 2..	14 ..	13 14 ..	8 0 0.. 0 10 0	—Sept. 1860
4800	Wheal Ludcott (lead), St. Ive	2 10 8..	4 ..	3⅝ 3⅞ ..	1 4 0.. 0 4 0	—Dec. 1860
1024	Wheal Margery (tin, copper)	14 16 0..	9 ..	8¼ 9 ..	0 10 0.. 0 10 0	—May, 1860
896	Wh. Margaret (tin), Uny Lel. [S.E.]†	9 17 6..	54 ..	51 53 ..	65 0 0.. 1 0 0	—Nov. 1860
100	Wheal Mary (tin), Lelant	36 2 6..	440 ..	..	280 5 0.. 7 0 0	—June, 1860
1024	Wh. Mary Ann (id.), Menheniot [S.E.]†	8 0 0..	21 ..	20 21 ..	52 17 6.. 1 0 0	—Dec. 1860
80	Wheal Owles, St. Just, Cornwall	70 0 0..	300 ..	..	263 3 0.. 7 10 0	—Nov. 1860
1040	Wh. Trelawny (sil.-id.), Liskeard [S.E.]†	4 7 0..	18½..	17⅛ 18¼ ..	43 15 0.. 1 0 0	—Oct. 1860
5000	Wicklow (copper) [L.], Wicklow	5 0 0..	7 4½..	..	39 5 0.. 2 12 6	—Sept. 1860

[* Dividends paid every two months. † Dividends paid every three months.]

MINES WITH DIVIDENDS IN ABEYANCE.

700	Aberdovey (silver-lead), Merioneth	0 10 0..	30 ..	..	0 10 0.. 0 10 0	—Mar. 1859
5120	Alfred Consols (cop.), Phillack [S.E.]	2 11 10.	3¾..	3 3½ ..	20 3 0.. 0 2 6	—April, 1859
1624	Balleswidden (tin), St. Just	11 5 0..	12 ..	..	12 5 0.. 0 5 0	—Jan. 1854
1200	Brightside & Froggatt Grove, Derbysh.	3 0 0..	3½..	..	3 0 0.. 3 0 0	—April, 1856
4096	Calstock Consols (copper)	5 10 0..	2½..	..	0 2 6.. 0 2 6	—Dec. 1857
200	Cefn Cwm Brwyno (lead), Cardigansh.	33 0 0..	20 ..	..	5 0 0.. 2 0 0	—Mar. 1858
2500	Central Minera (lead) [L. £5]	0 15 0..	5½..	..	0 4 0.. 0 4 0	—Sept. 1859
6000	Charlotte United, Perranuthnoe	1 16 2..	23s. ..	1⅛ ..	0 13 0.. 0 1 6	—Sept. 1859
2000	Collacombe (copper), Lamerton	5 0 0..	12 ..	..	3 5 0.. 0 8 0	—Dec. 1857
256	Condurrow (cop., tin), Camborne	20 0 0..	95 ..	..	85 0 0.. 2 0 0	—June, 1857
256	Copper Hill (copper) Redruth	48 0 0..	100 ..	95 100 ..	2 10 0.. 2 10 0	—Sept. 1859
4076	Devon and Cornwall (copper)	4 16 3..	6 ..	..	0 10 0.. 0 2 6	—Feb. 1859
672	Ding Dong (tin), Gulval	37 14 0..	15 ..	14½ 15 ..	16 7 6.. 1 10 0	—Mar. 1857
12800	Drake Walls (tin, copper), Calstock	2 1 0..	5⅛..	⅛ 5⅛ ..	0 13 6.. 0 2 0	—Sept. 1857
2048	East Falmouth (sil.-id.), Kenwyn, Kea	2 5 0..	2½..	..	0 7 6.. 0 2 6	—Jan. 1858
128	East Pool (tin, copper), Pool, Illogan	24 5 0..	410 ..	400 410 ..	305 0 0.. 2 10 0	—Aug. 1858
1024	East Wheal Margaret (tin, copper)	11 17 6..	6 ..	..	0 5 0.. 0 5 0	—Jan. 1854
5700	Exmouth (silver-lead), Christow	4 19 0..	8 ..	..	4 0 0.. 0 2 6	—Jan. 1860
6000	General Mining Co. for Irel. (cop., id.)	4 0 0..	5½..	6 ..	1 0 8.. 0 3 3	—June, 1853
119	Great Work (tin), Germoe	100 0 0..	110 ..	..	221 10 0.. 7 10 0	—Feb. 1857
6000	Hingston Down Con. (cop.), Cals. [S.E.]	4 14 6..	3¾..	3 3¼ ..	2 16 0.. 0 2 6	—Nov. 1856
20	Laxey Mining Company, Isle of Man	100 0 0..	1200 ..	..	1420 0 0..50 0 0	—June, 1857
5000	Lewis Mines (tin, copper), St. Erth	6 9 11.	1⅛..	1 1⅛ ..	0 10 0.. 0 10 0	—Dec. 1855
470	Newtownards Mining Co., Co. Down	50 0 0..	35 ..	..	56 0 0.. 1 0 0	—Sept. 1858
5000	North Dolcoath (copper), Camborne	1 19 6..	1 ..	..	0 5 0.. 0 2 6	—June, 1859
700	North Roskear (copper), Camborne	16 0 0..	30 ..	29 31 ..	157 0 0.. 4 0 0	—Sept. 1853
6000	N. Wh. Basset (cop., tin), Illogan [S.E.]	1 4 0..	4½..	..	14 12 0.. 0 5 0	—Aug. 1858
1024	Rosewarne and Herland United	10 10 0..	3¾..	3½ 3¾ ..	2 10 0.. 0 10 0	—Oct. 1859
12000	Sortridge Con. (cop.), Whitchurch [S.E.]	0 14 0..	16s. ..	14s. 16s. ..	0 10 0.. 0 2 6	—July, 1857
128	South Crinnis (copper), St. Austell	19 0 0..	285 ..	..	60 0 0..20 0 0	—June, 1855
1024	South Garras, Kenwyn	6 17 10.	4½..	..	6 0 0.. 2 0 0	—June, 1859
20000	St. Day United (tin and cop.), Redruth	2 5 0..	⅞..	¾ ⅞ ..	0 3 6.. 0 1 0	—Feb. 1858
120	Trethellan (cop.), Gwennap, Cornwall	15 10 0..	15 ..	..	403 13 6.. 2 10 0	—April, 1851
4096	Treweatha (sil.-id.), Menheniot, Cornw.	4 3 6..	3¾..	..	1 12 0.. 0 3 0	—April, 1857
20000	Vale of Towy (lead), Carmarthen [S.E.]	0 13 6..	11s. ..	9s. 10s. ..	0 5 9.. 0 1 0	—July, 1858
1024	West Providence (tin), St. Erth	14 15 0..	3¾..	..	33 1 9.. 0 10 0	—April, 1857
6140	Wheal Arthur (copper), Calstock	3 7 0..	11s. ..	9s. 11s. ..	1 6 0.. 0 0 0	—Oct. 1855
240	Wheal Bal (tin), St. Just	15 0 0..	16 ..	..	4 0 0.. 1 0 0	—Feb. 1859
4096	Wheal Edward (cop.), Calstock [S.E.]	7 5 0..	2½..	1⅞ 2¼ ..	0 5 0.. 0 5 0	—Mar. 1858
1024	Wheal Grylls (tin), Perranuthnoe	1 4 0..	6¼..	..	1 12 0.. 0 7 6	—Nov. 1859
430	Wheal Lovel (tin), Wendron	33 0 0..	7 ..	..	31 0 0.. 1 0 0	—Sept. 1856
240	Wheal Reeth (tin), Uny Lelant	53 10 0..	60 ..	55 60 ..	40 10 0.. 3 0 0	—Aug. 1852
198	Wheal Seton (tin, copper), Camborne	107 0 0..	127½..	127½ 132½..	303 10 0.. 3 0 0	—Dec. 1859
1022	Wheal Tremayne (tin, cop.), Gwinear	12 2 6..	10 ..	..	10 2 6.. 0 7 6	—Jan. 1854
4096	Wheal Wrey Consols (lead), St. Ive	2 14 0..	1½..	1⅛ 1¼ ..	2 12 6.. 0 2 6	—Dec. 1857

FOREIGN MINES.

2464	Burra Burra (cop.), South Australia	5 0 0..	157 ..	153 157 ..	215 0 0.. 5 0 0	—Nov. 1860
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0..	45 ..	43 45 ..	94 12 0.. 2 0 0	—July, 1860
13000	Copiapo Mining Company, Chili [S.E.]	16 0 0..	10 ..	8 10 ..	6 8 0.. 0 5 0	—Jan. 1861
15000	East Indian Coal, Calcutta [L.]	10 0 0..	10 ..	..	7½ per cent.	— Yearly.
70000	English and Australian [S.E.]	5 0 0..	2½..	2¼ 2½ ..	0 17 6.. 0 2 6	—Aug. 1860
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0..	23 ..	21 23 ..	16 10 0.. 0 15 0	—June, 1860
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0..	2⅜..	2¼ 2⅜ ..	0 6 0.. 0 2 0	—Dec. 1860
15000	Linares (id.), Pozo Ancho, Spain [S.E.]	3 0 0..	10½..	9 10 ..	7 16 2.. 0 6 8	—Sept. 1860
10000	Lusitanian (of Portugal) [S.E.]	2 0 0..	2½..	2 2¼ ..	0 17 3.. 0 2 6	—Aug. 1860
103815	Mariquita and New Granada [S.E.]	1 0 0..	⅜..	⅜ ⅜ ..	0 9 6.. 0 1 6	—July, 1859
88676	North British Australasian [S.E.]	1 0 0..	1⅛..	⅞ 1⅛ ..	0 9 0.. 0 1 3	—Jan. 1860
100000	Port Phillip (gold), Clunes [S.E.]	1 0 0..	⅜..	⅛ ⅜ ..	0 3 0.. 0 1 0	—Jan. 1860
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0..	27½..	26 27 x d ..	40 15 0.. 2 0 0	—Dec. 1860
20000	West Canada Mining Company [L.]	1 0 0..	1¼..	1¼ ..	0 2 0.. 0 2 0	—June, 1860

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Aiten & Quænangen Uni. (cop.), Norw.	16 10 0..	3 ..	..	4 5 0.. 0 15 0	—Nov. 1853
10000	Gt. Barrier Land, Min., &c., N. Ze. [L. £5]	3 10 0..	3¼..	3¼ ..	15 per cent.	—May, 1859
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0..	6 ..	5 6 ..	1 0 0.. 1 0 0	—June, 1855
43174	Unit. Mexican (sil.), Mexico [S.E.] Av. 28	5 0..	3¾..	3 3¼ ..	1 16 6.. 0 4 0	—Feb. 1853

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
20000	Australian (copper), South Australia [S. E.]	7 7 6 ..	1½ ..	⅜ 1⅛ ..	Sept. 1858
75000	Bon Accord, South Australia (copper) [L. £1] [S.E.]	0 17 6 ..	⅝ ..	⅜ ⅝ ..	Dec. 1860
6000	Central American (silver), [L.]	5 0 0 ..	8½ ..	..	Feb. 1859
17000	Central Italian (copper), [7000 £2 paid]	0 6 0 ..	— ..	..	Jan. 1859
60000	Clarendon Consols (copper), Jamaica [S.E.]	0 15 0 ..	⅜ ..	..	May, 1859
10000	Copiapo Smelting [L.], Chili	10 0 0 ..	8½ ..	..	..
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0 ..	⅞ ..	⅝ ⅞ ..	Fully paid.
30000	East Kongsberg Native Silver Mining Co. of Norway [L. £5]	0 10 0 ..	12s. ..	..	Feb. 1860
30000	Ellerslie and Bardowie, Jamaica	0 18 0 ..	1⅛ ..	..	July, 1859
8000	Eng. and Canadian Mining Co., Lim. [4000 £5 pd., 4000 £3]	3 10 0 ..	— ..	..	Oct. 1859
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0 ..	3 ..	2½ 3 ..	Fully paid.
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 0 0 ..	1⅜ ..	1⅛ 1¼ ..	..
4000	Hope Silver-Lead and Copper Mining Comp. [L.], Jamaica	25 0 0 ..	— ..	..	Fully paid.
50000	Imperial Thessalian (lead, &c.), Thessaly [L. £2]	0 10 0 ..	¾ ..	..	June, 1860
30000	Lagunazo (sulphur, copper), Portugal [L. £1]	0 5 0 ..	⅛ ..	..	Jan. 1861
60000	New Granada (gold), South America [S.E.]	1 0 0 ..	⅛ ..	..	Fully paid.
10000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0 ..	1 ..	..	Nov. 1858
60000	North Rhine Copper of South Australia [L. £1] [S.E.]	0 12 6 ..	⅝ ..	..	June, 1860
15000	Pachuca Silver Mining Company, Mexico [L. £1]	0 5 0 ..	⅛ ..	..	No call.
80000	Scottish Australian Mining Company [L. £1]	0 10 0 ..	⅜ ..	⅛ ⅜ ..	Nov. 1858
15000	South Europe Mining Company, Spain [L. £5]	3 0 0 ..	— ..	..	May, 1860
50000	St. John's United (copper, lead), Newfoundland [L. £1]	0 10 0 ..	⅝ ..	..	Mar. 1860
25000	Victor Emanuel, Val d'Ossola, Piedmont [L.]	1 0 0 ..	1⅛ ..	..	Fully paid.
1000	Western Africa Malachite (copper) [L.]	105 0 0 ..	— ..	..	Aug. 1858
35425	Wheal Jamaica (copper)	1 0 0 ..	18s. ..	— ..	Fully paid.
80000	Worthing (copper), South Australia, [L.] [S.E.]	1 0 0 ..	1 ..	⅜ 1 ..	Fully paid.

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
4825	Abbey Consols (id.) Cardigan	2 7 0..	1 ..	..	Nov. 1860
1000	Allt-y-Crib (lead)	1 5 0..	2 ..	..	..
4000	Allt-y-Maen (lead) [L. £1]	0 5 0..	12s. ..	..	July, 1859
10000	Angarrack (copper), Phillack	1 1 6..	1⅛..	..	June, 1859
5000	Ashburton Consols (copper)	— ..	¼..	..	No call.
1000	Ashburton United (cop., tin)	11 10 0..	16 ..	15½ ..	Mar. 1860
10000	Ballymoncen (cop.), Wicklow	2 0 0..	1 ..	..	..
10000	Bampfyide (copper), Devon	0 15 0..	4 ..	..	Aug. 1860
4000	Bedford Consols (copper)	1 16 0..	7s. ..	5s. 6s. ..	Oct. 1860
4000	Beneathwood (lead), Linkin	1 14 6..	2¼..	..	Nov. 1860
2000	Berehaven (copper), Ireland	1 0 0..	1¼..	..	..
250	Berrow Consols (lead)	17 16 0..	8 ..	..	July, 1860
1024	Besore, (lead, tin), Kenwyn	1 10 0..	— ..	..	July, 1859
7500	Bickleigh Vale Phœnix [L.]	2 0 0..	2¼..	..	Fully paid.
10000	BorlaseCon. (tin), St. Just [L. £1]	1 0 0..	1⅛..	..	Fully paid.
1248	Boscaswell (tin), Penzance	6 5 0..	8 ..	..	Dec. 1860
2280	Boscundle (tin, cp.), St. Austell	6 15 0..	4 ..	..	Sept. 1860
160	Bosorne & Bollowall, St. Just	6 5 0..	10 ..	..	Dec. 1860
123	Bosweddan and Wheal Castle	32 0 0..	— ..	..	Nov. 1858
5000	Bosworthan (tin), Sancreed	1 0 0..	1½..	..	June, 1860
5000	Bottle Hill (tin), Plympton	1 0 0..	1½..	1¼ 1⅜ ..	..
12000	Brea Cons. (tin), St. Ives [L.]	0 16 0..	1¾..	..	May, 1860
4000	Brynglas (lead), Cardigan	1 10 0..	3 ..	..	Sept. 1860
500	Bryn Gwiog (lead), Flint	4 0 0..	35 ..	32½ 35 ..	Oct. 1859
2000	Bryntail, Llanidloes, Montgo.	4 18 0..	5 ..	4¾ 5¼ ..	Dec. 1860
5950	Budnick Consols (tin), Perran	0 10 0..	1 ..	..	Oct. 1860
6380	Buller and Basset Unit. (cop.)	2 19 6..	2 ..	..	Oct. 1860
1200	Buller and Bertha (copper)	4 10 0..	3 ..	..	Sept. 1860
2448	Bwich (sil.-id). Cardiganshire	4 9 0..	1½..	..	Nov. 1860
915	Calvadnack, Wendron	17 0 0..	7 ..	..	Jan. 1861
1000	Camborne Consols (copper)	16 0 0..	8 ..	..	Aug. 1860
4600	Camborne Vean & Wh. Francis	6 7 4..	4 ..	3⅞ 4⅛ ..	Nov. 1860
914	Caradon Cons. (cop.), St. Cleer	19 13 0..	13 ..	..	Nov. 1860
1000	Cardigan Consols [L. £10]	6 0 0..	5¼..	..	Feb. 1860
916	Cargoll (silver-lead), Newlyn	15 5 7..	17 ..	17 18 ..	Sept. 1860
4370	Carnewas (id., cop.), Mawgan	0 18 0..	— ..	..	May, 1860
3000	Carn Vivian (tin, cop., lead)	1 12 6..	2½..	..	Nov. 1860
1056	Carvannall (cop.), Gwennap	21 11 7..	3 ..	..	Dec. 1860
10000	Carway and Duffryn [L. £5]	5 0 0..	5 ..	..	Fully paid.
20000	Carysfort (cop., id.) [L. £2½]	0 10 0..	19s. ..	18s. 6d. ..	Mar. 1859
25000	Casara (lead), Carma. [L. £1]	0 6 0..	9s. ..	..	April, 1860
7146	Catherine & Jane Cons. (lead)	1 4 0..	⅝..	..	Sept. 1860
2500	Cefn Clicen (lead), Flintshire	1 5 0..	1¼..	..	Sept. 1860
2560	Christopher Cons. (tin), Sith.	8 0 0..	8½..	..	Dec. 1859
2048	Chyandour, Wendron	2 10 0..	3 ..	..	Sept. 1858
2000	Clara (silver-lead) [L. £4]	3 17 6..	2½..	..	Oct. 1860
984	Clijah & Wentworth (tin, cp.)	26 0 6..	6 ..	..	Nov. 1859
6000	Clinton and Edgecombe United	1 0 0..	1¼..	1⅛ ..	Oct. 1860
500	Coed Cynric, Flintshire [L.]	10 0 0..	20 ..	..	..
3135	Coed Mawr Pool (lead) [L.]	4 3 0..	4 ..	..	July, 1860
2450	Cook's Kitchen (cop.) Illogan	17 0 9..	20 ..	18 20 ..	May, 1860
5000	Cornubia (tin), Roche	0 5 0..	⅜..	..	Sept. 1860
10000	Crugton (id.) [L. £1], Kirkcud.	0 10 0..	¾..	..	June, 1859
1024	Crane, Camborne	3 10 0..	5 ..	..	Dec. 1860
30000	Craven Moor (id.), Yorkshire	0 10 0..	6s. ..	4s. 5s. ..	No call.
12000	Crelake (cop.), Tavistock	— ..	3½..	3 3¼ ..	No call.
8000	Crookhaven (cop.) [L. £2½]	0 9 6..	9s. ..	..	May, 1860
2000	Crowlwm (lead), Llanidloes	1 10 0..	1¼..	1 1⅛ ..	No call.
6000	Crowndale (cop.), Tavistock	0 11 0..	3 ..	..	Nov. 1858
6000	Cuddra (cop., tin), St. Austell	1 0 0..	1⅜..	24s. 25s. ..	Nov. 1860
4900	Cumberland Black-Lead [L.]	5 0 0..	2 ..	..	Fully paid.
7000	Cwm Afon (cp.), Festi. [L. £1]	0 19 0..	— ..	..	Dec. 1860
21000	Dale, North Staffordshire [L.]	1 0 0..	7s. ..	..	Fully paid.
6600	Denham Bridge (cp.), [L. 10s.]	0 6 6..	3s. ..	..	Dec. 1859
4817	Devon and Courtenay (cop.)..	1 6 0..	11s. ..	..	Dec. 1859
4935	Devon Great Elizabeth (cop.)	1 7 0..	7s. ..	..	May, 1860
30000	Devon Kapunda [L. £1]	1 0 0..	11s. ..	..	Fully paid.
12000	Dev. New Copper Co. [L. £2]	— ..	2 ..	..	..
12000	Devon Union (copper) [L. £1]	0 10 0..	¾..	..	Dec. 1860
4766	Devon Wheal Buller (copper)	3 4 6..	¾..	..	Oct. 1860
1000	Durlo (tin), Lelant	5 12 0..	3½..	3 3½ ..	Dec. 1860
2048	Dulta (tin), St. Stephen's [L. £1]	0 6 0..	2¾..	..	Oct. 1860
3000	Dyfngwm (lead), Wales	12 6 6..	12 ..	..	Sept. 1858
244	Eaglebrook (lead.), Cardigan	72 0 0..	15 ..	..	Oct. 1860
4096	East Alfred Consols (copper)	3 1 9..	1¼..	1 1¼ ..	May, 1860
6000	E. Bertha Con. (cop.), Tavist.	0 13 0..	3s. ..	..	Dec.